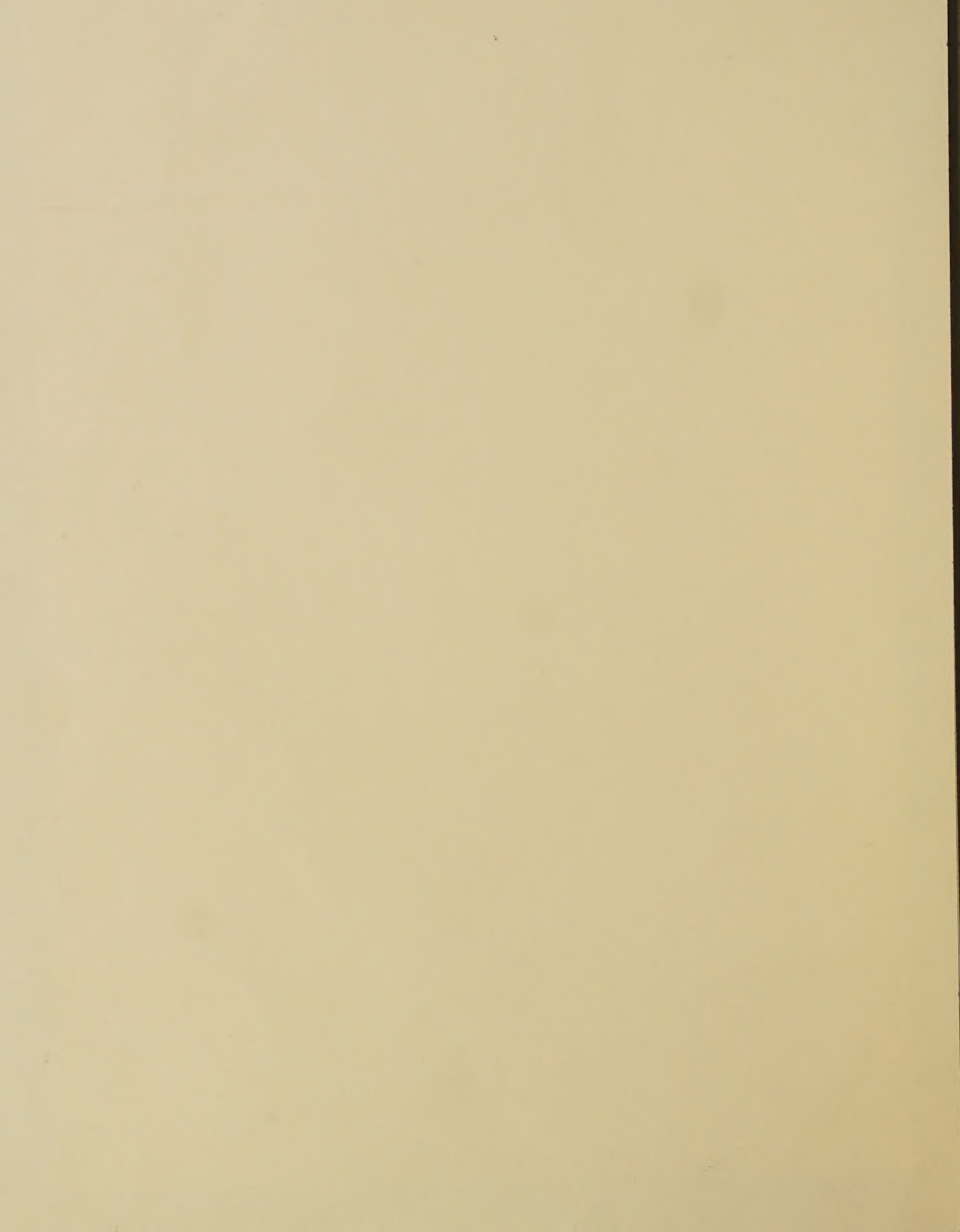


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Public Comments On EPFF

A Report on Analysis of Public Comments
Received on the Environmental Program
for the Future (EPFF) of August 1974
(A LONG TERM FORESTRY PLAN-DRAFT)



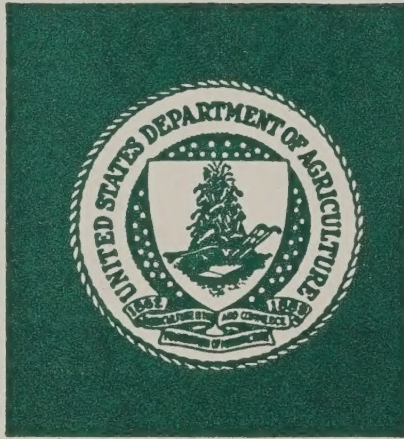
U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE
FEBRUARY 1975



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UNITED STATES DEPARTMENT OF AGRICULTURE
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February 28, 1975



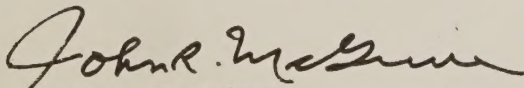
Dear Reader:

I want to thank all those who put in the time and effort to read, digest, and comment on the Environmental Program for the Future (EPFF). The ability of Forest Service programs to best meet the needs of the American people depends to a considerable degree on such public willingness to become a part of the decisionmaking process.

The following pages contain a narrative and analysis of the responses received from all over the nation. They describe what the public said about the EPFF and provide a statistical identification of the preferences indicated for various alternatives.

The thoughts and information reported and compiled in this document are being used in framing the program document required under the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA). The EPFF data and the public comments serve as basic information in the continuing process of developing a long-term forestry program for the nation through the Resources Planning Act. The public will be given additional opportunities to comment at various stages in the development of the program and assessment documents being prepared for submission to Congress by December 31, 1975.

Again, I thank you for your interest and urge you to continue that interest through the more detailed planning and decision-making process involved in the Resources Planning Act.


JOHN R. MCGUIRE
Chief

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Overview

The following report is an analysis of the 867 public responses received on the draft Environmental Program for the Future (EPFF), released by the Forest Service for public review in August of 1974. All public responses received through January 10, 1975, were analyzed in this report. Responses received after January 10 will also be analyzed and considered in the program review process.

This analysis summary of public comment is based on 867 documents received from the public. The data is taken directly from the documents submitted by the public in response to the draft EPFF. This summary identifies number of responses received from each State. It identifies affiliation of respondents and respective percentages of total responses by group.

Seventy percent of the respondents identified their preference of alternative supply levels (low, moderate, high) on some or all of the 25 systems offered in the EPFF. Six resource systems, one support system, and eighteen research activities. Public responses relating directly to the alternative supply levels in the EPFF often identified reasons for their selection. Some identified suggested modifications with the alternative selected. In addition, a large number of comments related to a broad range of concerns on activities of the National Forest System, State and Private Forestry, and Forest Research. All comments were reviewed in their entirety and incorporated in the analysis.

This report is available at Forest Service offices. Requests by mail should be addressed USDA, Forest Service, Room 3230, Washington, D.C. 20250.

Number of Responses By States

<u>States</u>	<u>No. of Responses</u>	<u>States</u>	<u>No. of Responses</u>
Alabama	1	Nevada	8
Alaska	26	New Hampshire	8
Arizona	22	New Jersey	8
Arkansas	2	New Mexico	46
California	81	New York	23
Colorado	32	North Carolina	3
Connecticut	7	North Dakota	6
Delaware	0	Ohio	9
Florida	6	Oklahoma	1
Georgia	7	Oregon	72
Hawaii	2	Pennsylvania	20
Idaho	40	Rhode Island	0
Illinois	13	South Carolina	1
Indiana	5	South Dakota	11
Iowa	4	Tennessee	6
Kansas	2	Texas	14
Kentucky	3	Utah	27
Louisiana	7	Vermont	3
Maine	5	Virginia	13
Maryland	4	Washington	52
Massachusetts	6	West Virginia	0
Michigan	21	Wisconsin	19
Minnesota	17	Wyoming	17
Mississippi	2	District of Columbia	23
Missouri	15	Puerto Rico	1
Montana	62	British Columbia	2
Nebraska	2	Unknown	80

Total Responses: 867 - Representing:

47 States

District of Columbia

Puerto Rico

British Columbia

Summary of Responses
by Categories

	<u>Agency</u>	<u>Faculty</u>	<u>Org/Group</u>	<u>Indiv</u>	<u>Unknown</u>	<u>Total</u>	<u>Percent of Total</u>
Academic		56		8		64	7
Conserv/Environ/Rec.			54	63		117	14
Forest Service			4	233	76	313	36
Government	64			18		82	9
Other			6	226		232	27
Resource Industry			37	22		59	7
TOTAL	64	56	101	570	76	867	100

Alternative Preference Summary Tables by Systems

The following statistical tables are intended merely as an indication of the number of respondents and their general preference. They do not, in any way, indicate an analysis of overall public endorsement for or against any specific alternative. The hundreds of narrative comments made by respondents explaining the reasons behind their preferences, and comments on other aspects of the EPFF, will be used in development of each phase of the Resources Planning Act documents.

The following pages display the alternative preference tables (low, moderate, or high supply level) by respondent categories (Academic, Government, Forest Service, etc.) for the 25 systems of the EPFF.

Respondent preference on alternatives are identified as to whether they indicated blanket endorsement, overall modified endorsement (reduce or expand), or suggested changes in specific items within the alternative level selected.

- Modified - reduce or expand an alternative (low, moderate, high) as stated in the EPFF
- Blanket - endorsement of an alternative as stated in the EPFF
- Itemized - items or activities within an alternative level changed by a respondent from those stated in the EPFF

The summary tables display the above information by individual respondent categories, all respondents, and all respondents less the Forest Service category.

Reading the Tables

The alphabetical listing on the next page identifies each of the 25 systems and areas dealt with in the EPFF. Each of the 25 is, in turn, identified by its corresponding letter on the statistical tables, page 6 to 13.

Using the table on page 6, all respondent categories, the following examples may help in reading the tables:

Under A (Land and Water System) the table shows that 40 respondents gave blanket endorsement to the low level, 113 gave blanket endorsement at the moderate level, and 360 gave blanket endorsement at the high level. Under C (Recreation and Wilderness System) 82 gave blanket endorsement to the low level, 207 to the moderate level, and 167 to the high level.

By reading the table in this manner, the preference level can be determined for modified or blanket support for each of the 25 systems or areas by respondent category.

ALPHABETICAL GUIDE BY SYSTEMS

- A. RESOURCE - Land and Water Systems
- B. RESOURCE - Timber Resource System
- C. RESOURCE - Recreation and Wilderness System
- D. RESOURCE - Range Resource System
- E. RESOURCE - Fish and Wildlife Habitat System
- F. RESOURCE - Human and Community Development System
- G. SUPPORT - Support Activities
- H. RESEARCH - Improved Timber Utilization
- I. RESEARCH - Intensive Timber Culture
- J. RESEARCH - Insect and Disease Assessment
- K. RESEARCH - Pest Management System
- L. RESEARCH - Protection of Wood in Storage and Use
- M. RESEARCH - Fire Prevention and Hazard Reduction
- N. RESEARCH - Fire Detection and Suppression
- O. RESEARCH - Recycling Sewage and Effluent Waters
- P. RESEARCH - Reducing Impacts of Man's Activities
- Q. RESEARCH - Minerals Development
- R. RESEARCH - Environmental Amenities
- S. RESEARCH - Recreation Management
- T. RESEARCH - Urban Environments
- U. RESEARCH - Resource Assessment
- V. RESEARCH - Evaluation of Resource Mgmt. & Market Dev.
- W. RESEARCH - Basic Hydrologic-Biologic Processes
- X. RESEARCH - Fish, Wildlife, and Livestock Ecology
- Y. RESEARCH - Timber-related Crops

ALL CATEGORIES
ALTERNATIVE PREFERENCE SUMMARY
BY SYSTEMS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
LOW																									
Modified	0	6	3	2	5	17	1	11	10	8	4	8	3	6	17	11	9	11	12	24	4	13	5	8	17
Blanket	40	107	82	121	83	84	41	121	116	51	43	90	88	84	93	58	67	107	106	109	78	145	86	76	164
Total	40	113	85	123	88	101	42	132	126	59	47	98	91	90	110	69	76	118	118	133	82	158	91	84	181
MODERATE																									
Modified	2	4	6	1	0	5	0	0	1	0	1	1	2	0	3	1	0	4	1	1	1	0	1	2	4
Blanket	113	161	207	158	150	159	152	132	158	186	144	128	167	192	108	147	227	127	154	146	188	170	137	156	125
Total	115	165	213	159	150	164	152	132	159	186	145	129	169	192	111	148	227	131	155	147	189	170	138	158	129
HIGH																									
Modified	6	8	5	5	7	11	3	5	3	2	2	2	2	0	2	0	2	4	3	1	2	3	2	4	1
Blanket	360	213	167	204	338	248	210	299	255	296	333	287	275	237	302	320	229	266	249	237	234	163	288	272	181
Total	366	221	172	209	345	259	213	304	258	298	335	289	277	237	304	320	231	270	252	238	236	166	290	276	182
BLANKET & MODIFIED	521	499	470	491	583	524	407	568	543	543	527	516	537	519	525	537	534	519	525	518	507	494	519	518	492
ITEMIZED	86	122	142	86	19	69	118	4	5	2	8	4	4	2	9	3	10	14	12	9	7	7	2	23	10
TOTAL	607	621	612	577	602	593	525	572	548	545	535	520	541	521	534	540	544	533	537	527	514	501	521	541	502
* DID NOT RESPOND TO SYSTEM	260	246	255	290	265	274	342	295	319	322	332	347	326	346	333	327	323	334	330	340	353	366	346	326	365

*This number is obtained by subtracting the total (above line) from 867, the number of respondents commenting on EPFF by January 10, 1975.

ALL CATEGORIES OTHER THAN FOREST SERVICE
ALTERNATIVE PREFERENCE SUMMARY
BY SYSTEMS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
LOW																									
Modified	0	3	3	1	2	8	1	9	7	5	3	4	2	5	12	8	7	9	8	15	3	9	4	6	11
Blanket	30	83	64	85	53	53	29	95	87	31	29	58	62	60	59	34	49	54	70	62	55	99	52	47	117
Total	30	86	67	86	55	61	30	104	94	36	32	62	64	65	71	42	56	63	78	77	58	108	56	53	128
MODERATE																									
Modified	1	1	3	0	0	4	0	0	1	0	1	1	2	0	1	0	0	3	0	1	1	0	1	1	3
Blanket	60	85	106	87	83	93	95	80	90	104	81	71	94	105	53	80	152	72	86	86	110	99	81	89	64
Total	61	86	109	87	83	97	95	80	91	104	82	72	96	105	54	80	152	75	86	87	111	99	82	90	67
HIGH																									
Modified	5	8	4	5	5	10	1	5	3	2	1	2	2	0	1	0	2	4	2	1	1	3	1	4	1
Blanket	233	131	101	116	229	166	117	171	152	209	223	202	182	166	212	226	134	198	176	166	155	109	194	186	123
Total	238	139	105	121	234	176	118	176	155	211	224	204	184	166	213	226	136	202	178	167	156	112	194	190	124
BLANKET & MODIFIED	329	311	281	284	372	334	243	360	340	351	338	338	344	336	338	348	344	340	342	331	325	319	332	333	124
ITEMIZED	59	80	103	60	12	42	82	4	5	2	8	4	2	1	8	3	8	11	7	6	7	5	1	11	8
TOTAL	388	391	384	344	384	376	325	364	345	353	346	342	346	337	346	351	352	351	349	337	332	324	333	344	132
DID NOT RESPOND TO SYSTEM	166	163	170	210	170	178	229	190	209	201	208	212	208	217	208	203	202	203	205	217	222	230	221	210	422

ACADEMIC CATEGORY
ALTERNATIVE PREFERENCE SUMMARY
BY SYSTEMS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
LOW																									
Modified	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	2	1	1	0	2	0	0	1	1	1
Blanket	3	6	8	5	3	4	1	9	11	2	2	6	4	6	6	0	3	4	7	3	6	9	3	2	9
Total	3	6	8	5	3	4	1	9	11	3	2	6	4	6	8	2	4	5	7	5	6	9	4	3	10
MODERATE																									
Modified	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Blanket	5	12	12	9	8	12	10	7	8	12	4	6	12	10	2	9	19	6	9	10	18	13	5	8	9
Total	5	13	13	9	8	12	10	7	8	12	4	6	13	10	2	9	19	6	9	10	18	13	5	8	9
HIGH																									
Modified	1	1	1	0	1	3	1	2	1	0	1	0	1	0	0	0	0	0	0	0	0	1	1	0	0
Blanket	26	16	11	17	32	14	14	15	14	20	27	21	18	15	24	24	11	22	17	12	11	7	22	21	10
Total	27	17	12	17	33	17	15	17	15	20	28	21	19	15	24	24	11	22	17	12	11	8	23	21	10
ITEMIZED	3	7	11	5	1	7	8	1	0	0	0	0	0	0	0	0	1	2	1	5	1	0	1	1	1

CONSERVATION/ENVIRONMENTAL/RECREATION CATEGORY
ALTERNATIVE PREFERENCE SUMMARY
BY SYSTEMS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
LOW																									
Modified	0	2	0	0	0	2	0	2	2	1	1	1	2	2	1	0	1	5	1	4	0	4	1	1	7
Blanket	6	29	10	26	6	4	8	27	21	8	6	9	16	17	14	5	11	5	6	17	18	24	14	9	26
Total	6	31	10	26	6	6	8	29	23	9	7	10	18	19	15	5	12	10	7	21	18	28	15	10	33
MODERATE																									
Modified	1	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0
Blanket	10	26	17	14	11	23	23	15	18	20	19	12	15	18	7	17	41	10	22	15	24	17	16	19	8
Total	11	26	18	14	11	23	23	15	19	20	19	12	15	18	8	17	41	11	22	15	25	17	17	19	8
HIGH																									
Modified	2	0	0	1	2	3	0	1	1	0	0	0	1	0	1	0	1	0	1	0	0	0	0	0	0
Blanket	52	11	22	19	61	44	28	35	35	53	49	57	44	42	53	54	28	57	47	45	30	27	49	48	33
Total	54	11	22	20	63	47	28	36	36	53	49	57	45	42	54	54	29	57	48	45	30	27	49	48	33
ITEMIZED	11	14	27	17	2	11	12	0	1	2	3	1	2	0	5	2	2	3	3	1	4	2	0	10	3

GOVERNMENT CATEGORY
ALTERNATIVE PREFERENCE SUMMARY
BY SYSTEMS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
LOW																									
Modified	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	1	2	0	0	2	0	0	0	0	0
Blanket	4	8	12	11	10	13	1	6	7	1	2	4	5	7	5	6	9	10	15	13	4	12	11	7	14
Total	4	8	12	11	10	13	1	6	7	2	2	4	5	7	7	7	11	10	15	15	4	12	11	7	14
MODERATE																									
Modified	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	0
Blanket	14	16	27	19	18	13	21	19	18	22	9	16	18	18	14	18	15	15	13	12	17	18	14	18	16
Total	14	16	28	19	18	13	21	19	18	22	9	17	19	18	14	18	15	16	13	13	17	18	14	18	16
HIGH																									
Modified	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Blanket	34	28	13	17	26	26	14	29	24	27	39	25	26	24	29	27	30	24	26	24	31	21	26	23	18
Total	34	29	13	17	26	26	14	29	24	27	39	25	26	24	29	27	30	24	26	24	31	21	26	24	18
ITEMIZED	8	6	5	2	2	2	9	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	1	1

FOREST SERVICE CATEGORY
ALTERNATIVE PREFERENCE SUMMARY
BY SYSTEMS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
LOW																									
Modified	0	3	0	1	3	9	0	2	3	3	1	4	1	1	5	3	2	2	4	9	1	4	1	2	6
Blanket	10	24	18	36	30	31	12	26	29	20	14	32	26	24	34	24	18	53	36	47	23	46	34	29	47
Total	10	27	18	37	33	40	12	28	32	23	15	36	27	25	39	27	20	55	40	56	24	50	35	31	53
MODERATE																									
Modified	1	3	3	1	0	1	0	0	0	0	0	0	0	0	2	1	0	1	1	0	0	0	0	1	1
Blanket	53	76	101	71	67	66	57	52	68	82	63	57	73	87	55	67	75	55	68	60	78	71	56	67	61
Total	54	79	104	72	67	67	57	52	68	82	63	57	73	87	57	68	75	56	69	60	78	71	56	67	62
HIGH																									
Modified	1	0	1	0	2	1	2	0	0	0	1	0	0	0	1	0	0	0	1	0	1	0	1	0	0
Blanket	127	82	66	88	109	82	93	128	103	87	110	85	93	71	90	94	95	68	73	71	79	54	94	86	58
Total	128	82	67	88	111	83	95	128	103	87	111	85	93	71	91	94	95	68	74	71	80	54	95	86	58
ITEMIZED	27	42	39	26	7	27	36	0	0	0	0	0	2	1	1	0	2	3	5	3	0	2	1	2	3

RESOURCE INDUSTRY CATEGORY

ALTERNATIVE PREFERENCE SUMMARY BY SYSTEMS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
LOW																									
Modified	0	0	1	0	0	3	1	0	0	0	0	1	0	2	3	4	3	1	4	6	1	2	1	3	2
Blanket	7	3	10	9	13	12	4	9	6	1	3	11	10	7	13	10	2	15	12	8	5	7	10	12	9
Total	7	3	11	9	13	15	5	9	6	1	3	12	10	9	16	14	5	16	16	14	6	9	11	15	11
MODERATE																									
Modified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blanket	11	3	16	9	11	7	11	7	4	6	4	7	9	7	7	10	11	7	7	9	6	11	9	4	4
Total	11	3	16	9	11	7	11	7	4	6	4	7	9	7	7	10	11	7	7	9	6	11	9	4	4
HIGH																									
Modified	0	2	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blanket	13	24	6	13	10	7	8	18	22	25	22	15	15	17	8	8	15	7	7	7	19	10	12	12	13
Total	13	26	6	14	10	7	8	19	22	26	22	15	15	17	8	8	15	7	7	7	19	10	12	12	13
ITEMIZED	7	7	4	2	3	6	10	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0

OTHER CATEGORY

ALTERNATIVE PREFERENCE SUMMARY
BY SYSTEMS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
LOW																									
Modified	0	1	2	1	2	3	0	7	5	2	2	2	0	1	4	1	0	2	3	1	2	3	1	1	1
Blanket	10	37	24	34	21	20	15	44	42	19	16	28	27	23	21	13	24	20	30	21	22	47	14	17	59
Total	10	38	26	35	23	23	15	51	47	21	18	30	27	24	25	14	24	22	33	22	24	50	15	18	60
MODERATE																									
Modified	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	3
Blanket	20	28	34	36	35	46	30	32	42	44	45	30	40	52	23	26	66	34	35	40	45	40	37	40	27
Total	20	28	34	36	35	46	30	32	42	44	46	30	40	52	23	26	66	35	35	40	45	40	37	41	30
HIGH																									
Modified	2	4	3	3	2	4	0	1	1	1	0	2	0	0	0	0	1	4	1	1	1	2	0	3	1
Blanket	108	52	49	50	100	75	53	74	57	84	86	84	79	68	98	113	50	88	79	78	64	44	85	82	49
Total	110	56	52	53	102	79	53	75	58	85	86	86	79	68	98	113	51	92	80	79	65	46	85	85	50
ITEMIZED	30	46	56	34	4	16	43	3	4	0	3	3	0	1	2	1	5	6	3	0	2	2	0	7	3

Item Preference Tables by Systems

The preceding tables identified alternative preferences of respondents by systems. The horizontal column entitled "Itemized" in the tables showed the number of respondents who chose to comment on certain items within systems at various alternative levels.

The following pages 15-18 represent the preferences of respondents to specific items within alternatives (low, moderate, high). Pages 19-38 identify numerically every item within each alternative (low, moderate, high) under all 25 systems.

When a respondent selected an alternative level and indicated a preference to expand or reduce a specific item(s) within that level, the item(s) was recorded as reduce or expand. If a respondent for example selected the moderate alternative level (assume 5 items within that moderate alternative level) and wanted 2 items reduced and 1 item expanded, the other 2 items were recorded as support.

However, many respondents selected items from all three alternatives (low, moderate, high) in a system simultaneously asking for reduce, expand or support of particular item(s). In such cases support was not recorded unless the respondent explicitly stated that a particular item should be supported.

A special problem was created by the fact that within many of the Research Systems, support of items within the moderate or high alternative levels inferred (as stated in the EPFF document - see page 28 in this document for example) support of items or an alternative level in lower (low or moderate) alternatives. Items in the lower alternatives were not recorded as support (unless explicitly stated by the respondent) so as to prevent an apparent concentration of support for lower alternative items. Thereby focus is on the relative magnitude of the deviations from support (expand and reduce) among the various items. As an example, on page 17 under column X (Fish, Wildlife, and Livestock Ecology - Research System) note items 4 and 5 in the moderate alternative. Item 4 has 10 to 1 support while item 5 is 10 to 1 reduce (items 4 and 5 in this system are on page 37). Item 6 in the high alternative in the same system is also 10 to 1 reduce for seemingly the same reason as in item 5 in the moderate alternative.

ALL CATEGORIES
SYSTEMS

Items	A WATER			B TIMBER			C RECREATION			D RANGE			E WILDLIFE			F HUMAN		
	red	sup	exp.	red	sup	exp	red	sup	exp	red	sup	exp	red	sup	exp	red	sup	exp
1	9			2	45	1	8	19		16	33		1	4	2	4	12	1
2	1	9			44		2	21	1	16	40		1	6		3	13	1
3	2	7		14	47		4	22		2	22			8		3	13	1
4	1	8	1	13	44	1		22		1	34	2	1	6		3	13	1
5	2	8		5	45	1	1	16		1	18	1		9		3	12	1
6		11		3	42		11	45	1	6	15			7	1	9	14	
7	3	17		1	22	2	2	50	2	1	23	2		8	1	1	14	2
8	1	10		1	25	4	2	48	3		19	1	2	4		1	14	2
9	2	12	1	1	25	4	6	42	2		19	1		3	2	1	14	2
10		14	1	1	25	4	5	41	6		15	1		3	2	1	14	2
11		16	1		30	2	1	50	1	2	1	1		3	2	2	11	
12	3	12	1		34	2	1	49	3		35	3		4		1	10	
13		9	3		34	3	19	34	4		26	1				1	11	
14	2	12	2		35	3	2	49	7	1	45	2				2	16	
15		15	1		35	2	2	34	2	1	42	2					24	6
16		17	1		35	2	5	44	3		31	1					24	5
17	1	14	1		28		1	55	1		29	1					24	5
18	1	16	1		28		1	55	1								25	5
19		51	1	1	27		4	53								1	29	6
20	4	42	1	2	27		5	57	14							1	29	7
21	5	45	1	1	28		1	55	3							2	27	7
22	2	41	9		29		1	59	1							1	30	7
23	5	33	9	1	25	1	25	27	1							6	11	
24		45	1	4	14	2	6	53	6							3	12	3
25	1	38	1	4	14	2		56	1							3	11	3
26		49	1	4	14	2	4	43	1							3	11	3
27	2	42	1	3	18	2	3	43	2								13	2
28		36	1	2	19	2		47									14	3
29		36		1	21	1											14	3
30	3	34		1	21	1												
31	3	34		1	21	1												
32	10	30		1	24	1												
33		38		1	31	1												
34		36		1	30													
35		35		7	17	1												
36		35		7	15	1												
37		38		6	20	1												
38				2	27	1												
39				2	56	4												
40				2	55	8												
41				2	52	8												
42				2	53	6												
43				2	49	3												
44				1	44	4												
45					43	3												
46					45	3												
47					43	3												
48					43	3												

*G - SUPPORT ACTIVITIES follows Y,

ALL CATEGORIES
SYSTEMS

Items

	H TIMBER UTIL red sup exp			I TIMBER CUL red sup exp		J I&D ASSESS' red sup exp		K PEST MGT red sup exp			L PROTECT WOOD red sup exp			M FIRE/HAZARD red sup exp	
1	2	3	1	1	4			4			2	2		2	
2		6			6		1	4			1	2	1	2	
3		4	1		5	2	1	1	2	3	2		2	2	
4	1	4	1	1	4		1	1	7		1	3		1	
5	1	1			2			1	7			4		1	
6		2				1		3	6						2
7								1	7					3	
8								1	7					4	
9									6	1					
10															

ALL CATEGORIES
SYSTEMS

	N FIRE D&S red sup exp			O RECYCLING red sup exp			P IMPACTS/MAN red sup exp		Q MINERALS red sup exp			R AMENITIES red sup exp			S RECREATION red sup exp		
1				1	3		1		2	3	1	1	8		1	5	
2	1			2	1		1	1	2	3			7		1	5	
3	1			2	1		1		1	7			7		1	5	
4	1			1	1	2				5		1	8		3	2	
5		1			3	1			1	5		1	9		3		
6		1			3	1		1	2	4			4		1	6	1
7	1	1		1	4		1		3	4			6		1	4	
8				1	3	1		2	1	2	5	1	4		2	5	1
9					3	1		1	2			1	4		2	3	
10					4			1	1				3		2	1	1
11					6			2					5			7	
12																	
13				2	3			1				1	3		2	2	
14								13					4				
15												1	5				
16												1	2				
17													5				
												1	2				

ALL CATEGORIES

SYSTEMS

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T	U	V	W	X	Y
URBAN ENVIR	RES ASSESS	MARKET DEV	HYDRO-BIO	F/W/L ECOL	TMBR-REL CROP
red sup exp	red sup exp	red sup exp	red sup exp	red sup exp	red sup exp
1	1 5	1 3	3	2	1 6 2
2	1 4	1 3	1 2	2	2 7
3	2 5	4	3	2	1 8
4	1 8	5	3	1	1 10
5	1 8	4	3	2	10 1
6	2 7 1	4 1	1 2	1	10 1 2
7	1 8	1 3	4		1 14 1
8	1 9	1 2 1	1 3		1 13 1
9	5 1		5		16
10	1 3	2	6		
11	1 5	1 1	4		
12	2 2	1 2 1	1 3		
13		1 1			
14		2			
15		2 3			
16		2			
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ITEM	LOW			ITEM	MODERATE			ITEM	HIGH		
	:red	sup	exp		:red	sup	exp		:red	sup	exp
	:			:	:			:	:		
	:			:	:			:	:		
	:			:	:			:	:		
1	: 1	19		: 34	: 1	28	1	: 67	:	44	1
2	: 1	19		: 35	: 1	30	1	: 68	: 2	50	1
3	: 1	23		: 36	: 1	31		: 69	: 1	25	
4	:	21		: 37	: 1	34		: 70	: 1	32	
5	: 1	22	1	: 38	: 1	35		: 71	: 1	33	
6	: 1	16	1	: 39	:	34	1	: 72	:	48	1
7	:	16	1	: 40	:	39	1	: 73	:	45	1
8	:	19		: 41	: 1	32		: 74	: 1	42	1
9	:	25	1	: 42	: 4	32	1	: 75	: 3	38	3
10	: 1	23		: 43	: 4	30	1	: 76	: 3	36	3
11	: 1	20	1	: 44	: 1	36		: 77	:	35	3
12	: 1	20	1	: 45	: 1	37		: 78	:	33	3
13	: 1	24	1	: 46	: 1	33		: 79	:	34	3
14	: 1	29	4	: 47	: 2	23	1	: 80	: 2	46	6
15	: 1	21	3	: 48	:	32		: 81	: 1	44	3
16	:	23	3	: 49	: 1	31		: 82	: 1	45	3
17	:	21	2	: 50	: 1	30		: 83	:	46	3
18	:	20	2	: 51	: 1	30		: 84	:	46	3
19	:	20	1	: 52	: 1	30		: 85	:	45	3
20	:	20		: 53	: 1	31		: 86	:	42	2
21	:	20		: 54	: 1	31		: 87	:	41	2
22	:	20		: 55	: 1	36		: 88	: 1	34	
23	:	19		: 56	: 1	39	1	: 89	: 1	34	
24	:	19	1	: 57	: 1	39	1	: 90	:	32	
25	:	15	1	: 58	: 1	37	1	: 91	:	38	
26	:	20	1	: 59	: 1	37	1	: 92	:	33	
27	:	20	1	: 60	: 2	36	1	: 93	: 1	33	
28	:	18	1	: 61	: 2	37	1	: 94	:	35	
29	:	21	1	: 62	:	29	1	: 95	: 1	40	
30	:	15	1	: 63	: 1	29	2	: 96	: 1	45	
31	: 1	33	1	: 64	: 3	32		: 97	: 4	27	
32	: 1	14	1	: 65	:	29		: 98	: 4	41	1
33	:	19	1	: 66	:	34		: 99	: 1	33	1

LOW SUPPLY ALTERNATIVE

On the National Forests and the National Grasslands:

- 1 - stabilize 100,000 acres of active sheet and gully erosion;
- 2 - treat 770 miles of streams and shorelines by stabilizing banks and removing debris;
- 3 - obliterate 1,800 miles of unneeded roads; restore land to productive base;
- 4 - restore 200 acres of those lands most disturbed by prospecting and surface mining; and
- 5 - study the potential additions to the National Wild & Scenic Rivers System on 16 watersheds.

- 6 - Treat lands tributary to water resources development projects, including 45,000 acres of erosion control, stabilization, and rehabilitation, and 1,600 acres of keeping reservoirs free of debris to make the area safe for public use and to maintain scenic beauty.
- 7 - Provide 65 man-years of assistance to State planning agencies and multi-county district planning organizations for cooperative planning.
- 8 - Provide erosion control and critical area stabilization on 38,000 acres annually.
- 9 - Provide 30 man-years of annual effort for coverage of Forest Service responsibilities in 60 interdepartmental and USDA planning programs. This effort will include limited data development, sampling intensity, and alternatives formulation.

MODERATE SUPPLY ALTERNATIVE

On the National Forests and National Grasslands:

- 10 - stabilize 190,000 acres of active sheet and gully erosion;
- 11 - treat 2,400 miles of streams and shorelines by stabilizing banks and removing debris;
- 12 - obliterate 2,500 miles of unneeded roads; restore land to productive base;
- 13 - restore 300 acres of those lands most disturbed by prospecting and surface mining;
- 14 - study the potential additions to the National Wild & Scenic Rivers System on 24 watersheds.
- 15 - treat lands tributary to water resources development projects including 60,000 acres of erosion control, stabilization, and rehabilitation and 2,000 acres of keeping reservoirs free of debris to make the areas safe for public use and to maintain scenic beauty.

- 16 - Provide 85 man-years of assistance to State planning agencies and multi-county district organizations for cooperative planning.
- 17 - Provide erosion control and critical area stabilization on 50,000 acres annually.
- 18 - Provide 45 man-years of annual effort for coverage of Forest Service responsibilities in 60 interdepartmental and USDA planning programs. This level will include basic data development, intermediate sampling intensity, and identification of alternatives with an array of actions to meet multiple objectives.

HIGH SUPPLY ALTERNATIVE

On the National Forests and National Grasslands:

- 19 - stabilize 300,000 acres of active sheet and gully erosion;
- 20 - treat 6,000 miles of streams and shorelines by stabilizing banks and removing debris;
- 21 - obliterate 4,000 miles of unneeded roads; restore land to productive base;
- 22 - restore 500 acres of those lands most disturbed by prospecting and surface mining; and
- 23 - study the potential additions to the National Wild & Scenic Rivers System on 30 watersheds.

- 24 - Treat lands tributary to water resources development projects, including 100,000 acres of erosion control, stabilization, and rehabilitation, and 3,500 acres of keeping reservoirs free of debris to make the areas safe for public use and to maintain scenic beauty.
- 25 - Provide 125 man-years of assistance to State planning agencies and multi-county district planning organizations for cooperative planning.
- 26 - Provide erosion control and critical area stabilization on 88,000 acres.
- 27 - Provide 120 man-years of annual effort for coverage of Forest Service responsibilities in 60 interdepartmental and USDA planning programs. This level will include full data development, sampling at a high-confidence level, a full formulation of alternative actions to meet multiple objectives close intertie with other internal planning and follow-on implementation.

ACTIVITIES COMMON TO ALL ALTERNATIVES

On the National Forests and National Grasslands:

- 28 - by 1979, have comprehensive land-use management plans prepared for 75 percent of the National Forest System lands. Cooperate with the States and others to establish long-range ownership patterns for the National Forests. Conduct basic land and soil resource inventories to evaluate and describe conditions which illustrate inherent limitations and capabilities of specific land areas. Positively enhance, through scientific management, the quantity and timing of water flowing from National Forest lands. Inventory water uses and needs on National Forest lands. See that adequate quality water is available in streams, lakes, and rivers to administer and use the National Forests;
- 29 - endeavor to assure that water resource development proposals are compatible with and harmonize with other resource and environmental values;
- 30 - intensify administration of 150,000 mining claims, minerals leases, and prospecting permits; and
- 31 - conduct mineral investigations on 24 million acres for multiple-use planning and keep aware of mineral activity.

- 32 - Assure orderly occupancy and use of about 7,600,000 acres by about 61,000 holders of special land-use permits. This represents an anticipated increase of 12,000 permits. The 1973 level was 49,000 permits. This increase would provide for:
 - 1,000 recreation facilities (not recreation residences);
 - 5,000 roads, 7,000 utilities, and 2,000 water facilities;
 - 1,000 industrial and minerals-related uses; and
 - 1,000 community developments.
- On all forest lands:
 - 33 - promote more effective use of forests for municipal water supply and esthetic or recreational activities related to water use or enjoyment;
 - 34 - cooperate with other Agencies in assisting local organizations to plan and install forestry measures for watershed protection on non-Federal lands; and
 - 35 - rehabilitate sites of natural disasters by restoring the land to a favorable watershed condition. Emergency measures would be taken on new burns, flood damage, and earthquake damage within the limits of authority on National Forest System and State and private forest lands.
 - 37 - Improve landownership patterns to achieve efficiencies in administration and management.

LEVEL OF ACTIVITY REQUIRED DURING PERIOD 1975-79 TO PRODUCE OUTPUTS

LOW SUPPLY ALTERNATIVE

On the National Forests:

- 1 - conduct silvicultural examinations and prepare prescriptions for 16 million acres;
- 2 - carry out inventories on 39 forests covering 25 million commercial forest acres and prepare timber management plans on 46 forests covering 29 million commercial forest acres;
- 3 - offer for sale approximately 13.4 billion board feet ^{1/} of timber annually;
- 4 - initiate 1,200 miles of road construction and reconstruction for timber access;
- 5 - administer timber sale purchaser road construction on 36,000 miles and provide supplemental work as appropriate;
- 6 - continue the availability for timber production and currently inventoried commercial forest land now available for that purpose through the sale area betterment program by reforestation of 1.2 million acres of cutover land and thinning and other cultural measures on 1.5 million acres; and
- 7 - reforest 765,000 acres, apply thinnings and other cultural measures to 500,000 acres, and conduct commercial thinning and salvage effects to increase growth that will result in increasing the allowable harvest by 0.2 billion board feet by 1984.

Provide technical assistance to 580,000 woodland owners on 37 million acres that will result in:

- 8 - 1.5 million acres of planting and seeding;
- 9 - 0.9 million acres of timberstand improvement; and
- 10 - forest land management plans for 465,000 acres.

11 Provide technical assistance to 30,000 forest products operators to improve utilization efficiency and profit that will increase timber supply during the period by 4 billion board feet.

12 Provide timber harvesting technical assistance involving 4.8 billion board feet on 8.6 million acres.

Cooperate with States in:

- 13 - producing and distributing 2.8 billion seedlings;
- 14 - planting and seeding 3.5 million acres;
- 15 - developing and managing seed orchards on 5,000 acres; and
- 16 - producing 700 million trees from improved seed.

MODERATE SUPPLY ALTERNATIVE

On the National Forests:

- 11 - conduct silvicultural examinations and prepare prescriptions for 19 million acres;
- 18 - carry out inventories on 50 forests covering 31 million commercial forest acres and preparing timber management plans on 61 forests covering 37 million commercial forest acres;
- 14 - offering for sale approximately 14.8 billion board feet ^{1/} of timber by 1979;
- 20 - initiate 3,850 miles of road construction and reconstruction for timber access;
- 21 - administer timber sale purchaser road construction on 42,500 miles and provide supplemental work as appropriate;
- 22 - continue the availability for timber production the currently inventoried commercial forest land now available for that purpose through the sale area betterment program by reforestation of 1.4 million acres of cutover land and thinning and other cultural measures on 1.2 million acres; and
- 23 - reforest 815,000 acres, apply thinning and other cultural measures to 1.2 million acres, and conduct commercial thinning and salvage efforts to increase growth that will result in increasing the allowable harvest by 0.8 billion board feet by 1984.

Provide technical assistance to 725,000 woodland owners on 46 million acres that will result in:

- 24 - 3.7 million acres of planting and seeding;
- 25 - 2.9 million acres of timberstand improvement; and
- 26 - forest land management plans for 618,000 acres.

27 Provide technical assistance to 36,800 forest products operators to improve utilization efficiency and profit that will increase timber supply during the period by 7.3 billion board feet.

28 Provide timber harvesting technical assistance involving 6.0 billion board feet on 10.7 million acres.

Cooperate with States in:

- 29 - producing and distributing 4.3 billion seedlings;
- 30 - planting and seeding 5.4 million acres;
- 31 - developing and managing seed orchards on 7,000 acres; and
- 32 - producing 800 million trees from improved seed.

HIGH SUPPLY ALTERNATIVE

On the National Forests:

- 33 - conduct silvicultural examinations and prepare prescriptions for 25 million acres;
- 34 - carry out inventories on 52 forests covering 41 million commercial forest acres and preparing timber management plans on 73 forests covering 47 million commercial forest acres;
- 35 - offer for sale approximately 17.1 billion board feet ^{1/} of timber by 1979;
- 36 - initiate 8,750 miles of road construction and reconstruction for timber access;
- 37 - administer timber sale purchaser road construction on 40,000 miles and provide supplemental work as appropriate;
- 38 - continue the availability for timber production the currently inventoried commercial forest land now available for that purpose through the sale area betterment program by reforestation of 1.9 million acres of cutover land and thinning and other cultural measures on 1.5 million acres; and
- 39 - reforest 1.5 million acres; apply thinning and other cultural measures to 3.0 million acres of young timberstands, and conducting commercial thinning and salvage efforts to increase growth that will result in increasing the allowable harvest by 3.8 billion board feet by 1984.

Provide technical assistance to 900,000 woodland owners on 60 million acres that will result in:

- 40 - 4.7 million acres of planting and seeding;
- 41 - 3.7 million acres of timberstand improvement; and
- 42 - forest land management plans for 1,090,000 acres.

43 Provide technical assistance to 40,000 forest products operators to improve utilization efficiency and profit that will increase timber supply during the period by 11.4 billion board feet.

44 Provide timber harvesting technical assistance involving 7.0 billion board feet on 13.3 million acres.

Cooperate with States in:

- 45 - producing and distributing 5.9 billion seedlings;
- 46 - planting and seeding 7.4 million acres;
- 47 - developing and managing seed orchards on 8,000 acres; and
- 48 - producing 1,000 million trees from improved seed.

^{1/} All volume is given in international 1/4" log rule.

LEVEL OF ACTIVITY REQUIRED DURING PERIOD 1975-79 TO PRODUCE OUTPUTSLOW SUPPLY ALTERNATIVE

On the National Forests and National Grasslands:

- 1 - plan and develop new Forest Service-operated recreation sites with a people-at-one-time (PAOT) capacity of 15,000. These sites would include camp- and picnic grounds, visitor information centers, and other developed recreation;
 - 2 - maintain facilities and provide sanitation and cleanup at Forest Service-operated recreation sites with a people-at-one-time (PAOT) capacity of 765,000 in 1979;
 - 3 - provide interpretative and orientation services at 470 sites; and
 - 4 - continue development and use of methods to better recognize and protect landscape values in the design of resource-use activities; and
- 5 Provide technical assistance to woodland owners on 20,000 acres for establishment of trails, parks, or recreation areas.

MODERATE SUPPLY ALTERNATIVE

On the National Forest and National Grasslands:

- 6 - plan and develop new Forest Service-operated recreation sites with a people-at-one-time (PAOT) capacity of 87,000. These sites would include camp- and picnic grounds, visitor information centers, and other developed recreation;
 - 7 - rehabilitate or improve Forest Service-operated recreation sites with a people-at-one-time (PAOT) capacity of 100,000;
 - 8 - maintain facilities and provide sanitation and cleanup at Forest Service-operated recreation sites with a people-at-one-time (PAOT) capacity of 837,000 in 1979;
 - 9 - provide interpretative and orientation services at 675 sites;
 - 10 - study 1.7 million acres from the final new study area list for consideration as wilderness;
 - 11 - accelerate development and use of methods to better recognize and protect landscape values in the design of resource use activities.
 - 12 - increase management for and of dispersed area recreation;
 - 13 - initiate 600 miles of road construction and reconstruction for recreation use and for access to wilderness and dispersed recreation use; and
 - 14 - initiate 1,800 miles of trail construction and reconstruction for expansion of dispersed recreation use opportunities.
- 15 Provide technical assistance to woodland owners on 27,000 acres for establishment of trails, parks, or recreation areas.

HIGH SUPPLY ALTERNATIVE

On the National Forests and National Grasslands:

- 16 - plan and develop new Forest Service-operated recreation sites with a people-at-one-time (PAOT) capacity of 351,000. These sites would include camp- and picnic grounds, visitor information centers, and other developed recreation;
 - 17 - rehabilitate or improve Forest Service-operated recreation sites with a people-at-one-time (PAOT) capacity of 110,000;
 - 18 - maintain facilities and provide sanitation and cleanup at Forest Service-operated recreation sites with a people-at-one-time (PAOT) capacity of 1,100,000 in 1979;
 - 19 - provide interpretative and orientation services at 1,050 sites;
 - 20 - study 2.4 million acres from the final new study area list for classification as wilderness;
 - 21 - accelerate development and use of methods to better recognize and protect landscape values in the design of resource use activities.
 - 22 - intensify management for and of dispersed area recreation;
 - 23 - initiate 2,000 miles of road construction and reconstruction for recreation use and for access to wilderness and dispersed recreation use; and
 - 24 - initiate 6,100 miles of trail construction and reconstruction for expansion of dispersed recreation use opportunities.
- 25 Provide technical assistance to woodland owners on 47,000 acres for establishment of trails, parks, or recreation areas.

ACTIVITIES COMMON TO ALL ALTERNATIVES

On the National Forests and National Grasslands:

- 26 - administer 19,000 recreation residence permits but provide no additional sites;
- 27 - manage Wilderness, complete reclassification of Primitive Areas, and manage all areas identified as possible wilderness so as to not compromise the possibility of wilderness classification pending study; and
- 28 - encourage appropriate expansion of the National Wild and Scenic Rivers and the National Trails Systems and manage these existing systems.

LEVEL OF ACTIVITY REQUIRED DURING PERIOD 1975-79 TO PRODUCE OUTPUTSLOW SUPPLY ALTERNATIVE

On the National Forests and National Grasslands:

- 1 - increase the number NFS range allotments under improved management by 500 (6,570 to 7,070);
- 2 - maintain the available NFS grazing at 11.3 million animal-unit-months;
- 3 - initiate treatment, through improved management, on .7 million acres of deteriorated NFS rangeland; and
- 4 - remove livestock grazing from 2.4 million acres of poor condition NFS rangeland.

MODERATE SUPPLY ALTERNATIVE

On the National Forest and National Grasslands:

- 1 - increase the number of NFS range allotments under improved management by 1,000 (6,570 to 7,570);
- 2 - increase the available NFS grazing by 2 million animal-unit-months;
- 3 - initiate treatment, through improved management, on 1.5 million acres of deteriorated NFS rangeland;
- 4 - remove livestock grazing from 2.4 million acres of poor condition NFS rangeland; and
- 5 - adjust distribution of grazing from poor condition NFS rangeland to rangeland with additional capacity.

HIGH SUPPLY ALTERNATIVE

On the National Forests and National Grasslands:

- 1 - increase the number of NFS range allotments under improved management by 1,730 (6,570 to 8,300);
- 2 - increase the NFS available grazing by 5 million animal-unit-months;
- 3 - initiate treatment, through improved management, on 2.4 million acres of deteriorated NFS rangeland; and
- 4 - remove livestock grazing from 2.4 million acres of poor condition NFS rangeland.

On privately owned forest-range:

- 1 - provide assistance in the identification and elimination of exploitative grazing on 1.4 million acres; and
- 2 - provide assistance in the establishment and expansion of proper grazing management on 4 million acres.

On all forest rangeland:

- 1 - monitor and research the social, economic, and ecological responses of selected areas to more intensive range programs; and
- 2 - provide feedback information for future program direction.

LEVEL OF ACTIVITY REQUIRED DURING PERIOD 1975-79 TO PRODUCE OUTPUTS

LOW SUPPLY ALTERNATIVE

On the National Forests and National Grasslands:

- 1 - improve habitat through coordination with other management activities on 15.8 million acres;
- 2 - protect endangered and threatened species through management practices specially designed for that purpose and improve habitat on 110,000 acres; and
- 3 - improve 900,000 acres of fish and wildlife habitat.

4 Provide technical assistance to woodland owners that will result in 1.4 million acres of wildlife habitat development.

MODERATE SUPPLY ALTERNATIVE

On the National Forests and National Grasslands:

- 5 - improve habitat through coordination with other management activities on 18.4 million acres;
- 6 - protect endangered and threatened species through management practices specially designed for that purpose and improve habitat on 195,000 acres; and
- 7 - improve 1.0 million acres of fish and wildlife habitat.

8 Provide technical assistance to woodland owners that will result in 1.5 million acres of wildlife habitat development.

HIGH SUPPLY ALTERNATIVE

On the National Forests and National Grasslands:

- 9 - improve habitat through coordination with other management activities on 22.5 million acres;
- 10 - protect endangered and threatened species through management practices specially designed for that purpose and improve habitat on 400,000 acres; and
- 11 - improve 1.2 million acres of fish and wildlife habitat.

12 Provide technical assistance to woodland owners that will result in 1.6 million acres of wildlife habitat development.

LEVEL OF ACTIVITY REQUIRED DURING PERIOD 1975-79 TO PRODUCE OUTPUTS

LOW SUPPLY ALTERNATIVE

Youth Conservation Corps: Continue this program at its present level during the plan period. During the next 5 years, this will result in:

- 1 - 50,000 youths gainfully employed with personal income amounting to almost \$19 million;
- 2 - 4 million hours of work-learning experience;
- 3 - an appraised value of \$62.5 million of conservation work; and
- 4 - an equivalent of 450,000 hours of environmental or conservation education.

Environmental Education: Under this alternative, continue in-service re-education to provide for teacher-education activities. During the first 5 years, this will involve re-education of 2,500 Forest Service employees and education for 17,000 teachers, resource people, and others. In addition, continue a program of modest revision of environmental education publications.

Rural Development: Provide technical assistance in 10 program thrusts. A total of 280 man-years will be provided through more than 12,000 assists. The expected emphasis in each of the 10 program thrusts is:

	Years of Assistance/annually
Organization & leadership development	8
Comprehensive planning	34
Community Services & facilities	32
Housing	6
Health & welfare	4
Manpower & development	42
Recreation & tourism	17
Environmental improvement	115
Business & industrial development	27
Rural cooperatives	5

MODERATE SUPPLY ALTERNATIVE

Youth Conservation Corps: Expand this program during the period resulting in the following accomplishments during the first 5 years:

- 1 - 185,000 youths gainfully employed with personal incomes amounting to almost \$70 million;
- 2 - 15 million hours of work-learning experience;
- 3 - an appraised value of \$231.3 million of conservation work;
- 4 - an equivalent of 1.7 million hours of environmental or conservation education.

Environmental Education: Under this alternative, expand the entire program to cover additional approaches for education such as an educational television series. This expansion will require at least one full-time person in each Region and Area and additional staff time at other areas near large populations. During the first 5 years, the following is envisioned:

- 1 - re-education of 3,200 Forest Service employees who in turn will provide training for 21,000 teachers, resource people, and others;
- 2 - complete the revision of the environmental education publications;
- 3 - plan and complete pilot phase of the educational television series.

Rural Development: Provide technical assistance in 10 program thrusts. A total of 340 man-years will be provided through more than 16,000 assists. The expected emphasis in each of the 10 program thrusts is:

	Man-years of Assistance/annually
Organization & leadership development	9
Comprehensive planning	45
Community services & facilities	27
Housing	7
Health & welfare	5
Manpower & development	50
Recreation & tourism	25
Environmental improvement	135
Business & industrial development	31
Rural cooperatives	6

HIGH SUPPLY ALTERNATIVE

Youth Conservation Corps: Intensify this program during the period resulting in the following accomplishments during the first 5 years:

- 1 - 400,000 youths gainfully employed with personal income amounting to \$150 million;
- 2 - 32 million hours of working-learning experience;
- 3 - an appraised value of \$500 million of conservation work;
- 4 - an equivalent of 3.6 million hours of environmental or conservation education.

Environmental Education: Under this alternative expand the entire program to cover additional approaches for education, such as an educational television series, and establishing environmental education sites. This expansion will require at least one full-time person in each Region and Area and additional staff time at other areas near large populations. During the first 5 years, the following is envisioned:

- 1 - re-educate 3,200 Forest Service employees who in turn will provide training for 21,000 teachers, resource people, and others;
- 2 - complete the revision of the environmental education publications;
- 3 - complete the educational television series; and
- 4 - establish a series of environmental education sites on National Forest lands.

Rural Development: Provide technical assistance in 10 program thrusts. A total of 550 man-years will be provided through more than 23,000 assists. The expected emphasis in each of the 10 program thrusts is as follows:

	Years of Assistance/annually
Organization & leadership development	16
Comprehensive planning	67
Community services & facilities	43
Housing	12
Health & welfare	8
Manpower & development	83
Recreation & tourism	34
Environmental improvement	225
Business & industrial development	52
Rural cooperatives	10

ACTIVITIES COMMON TO ALL SUPPLY ALTERNATIVES

Job Corps: Continue this program at its present level during the plan period. During the period, this will result in:

- 1 - 33,000 youths completing the training program;
- 2 - 25,600 youths placed in jobs; and
- 3 - \$35 million worth of training projects completed.

Other Manpower Training Programs: Continue these programs at their present levels. During the period, they will result in gainful employment for 33,000 individuals and accomplished conservation work with an appraised value of \$26.4 million.

Operation Mainstream: Continue this program at the current level during the plan period. This will result in:

- 28 - 3,900 individuals gainfully employed with a personal income of \$8.5 million; and
- 29 - \$10 million in conservation work accomplished.

SUPPORT ACTIVITIES

This section includes activities which are essential to meet all resource system outputs. Thus, they should not be displayed with any one system. Rather, they are common to all and for this reason are listed as support activities. Three categories are presented to show that certain of these activities applicable primarily to Federal, non-Federal, or all forest lands.

Activity	Alternative		
	Low (During the period 1975 to 1979 unless noted otherwise)	Moderate	High
<u>All Forest Land</u>			
Protect 649 million acres of forest land from insect and disease. This will be accomplished by:			
- conducting detection surveys on (million acres)	1 1,040	34 2,535	67 3,460
- evaluate pest outbreaks on about (million acres)	2 450	35 580	68 715
<u>Non-Federal Forest Land</u>			
- by 1979 provide a level of fire protection at (million acres)	3 631	36 696	69 787
- by 1979 reduce Class E and larger fires by	4 -	37 60	70 100
- by 1979 intensified fire control on (thousand acres)	5 825	38 1,110	71 1,950
<u>National Forest System Lands</u>			
- provide specific information, technical services, and surveillance for:			
the soil resource on (million acres)	6 54	39 66	72 90
the water resource on (million acres)	7 42	40 50	73 70
the geologic resource on (million acres)	8 15	41 18	74 25
- intensify forest fire protection			
thousand man-caused fires prevented	9 0.5	42 3.7	75 5.0
thousand acres saved from burning	10 35	43 260	76 350
- fuel treatment			
million acres of fuel reduction	11 2.0	44 3.3	77 4.2
thousand miles of fuel and firebreaks	12 8.0	45 12.0	78 15.2
thousand acres of type conversion	13 75	46 145	79 312
- acquisition of land (thousand acres)	14 74	47 130	80 375
- exchange of land - offerings (thousand acres)	15 435	48 488	81 725
selections (thousand acres)	16 315	49 362	82 550
- land lines - maintain (thousands of miles)	17 3.5	50 7.2	83 16.2
survey (")	18 9.6	51 14.7	84 26.8
mark and post (thousands of miles)	19 8.1	52 13.0	85 19.5
- property corners - establish (thousands)	20 13.2	53 21.8	86 32.1
monument (")	21 39.0	54 61.7	87 86.0
- structural improvements			
field offices	22 15	55 75	88 120
dwellings and barracks	23 30	56 260	89 525
service and storage facilities	24 10	57 145	90 260
water and sanitation systems	25 80	58 332	91 485
communication facilities	26 35	59 195	92 360
fire improvements	27 0	60 90	93 245
site acquisition	28 0	61 12	94 25
- miles of road maintained (thousands)	29 90	62 93	95 109
- miles of trail maintained (thousands)	30 43	63 46	96 53
- miles of general purpose road constructed (thousands)	31 0	64 1.6	97 4.1
- miles of trails constructed or reconstructed (thousands)	32 0.1	65 2.3	98 7.7
- cooperative law enforcement agreements with local agencies by 1979 (number)	33 330	66 475	99 700

Research Activities

Outputs shown in the previous presentation are related to Forest Service management actions, either directly in the case of National Forest management or indirectly for State and private land where management receives assistance via Forest Service programs.

The role of research in the overall forest management scheme is to provide the necessary scientific knowledge and technology for proper assessment of the outcomes of alternative actions. The Forest Service Research Program is closely coordinated with the National Forest System and the State and Private Forestry management programs. However, research orientation is usually broader than this because it addresses problems common to all forest land, both public and private. In addition, Forest Service researchers work closely with their counterparts at universities and other research agencies to jointly solve management problems. For these reasons, the Forest Service Research Program is presented separately. The following material outlines the planned program at the low, moderate, and high alternative levels for each of 18 program areas.

Improved Timber Utilization

Produce the knowledge and technology necessary to increase timber supplies through more efficient utilization practices. Implementation of research results will depend upon economic realities. This research will provide for:

Low Alternative

- 1 - increased timber supply by the equivalent of 2 billion board-feet over a 10-year period
- 2 - more acceptable timber harvesting methods from both technical and esthetic points of view
- 3 - fewer timber and wood products waste disposal problems in forest and urban areas
- 4 - more efficient use of wood products in structural systems and thereby safer and better engineered products.

Moderate Alternative--includes all activities shown under the low alternative with the following changes:

- 5 - increased timber supply by the equivalent of 11 billion board-feet over a 10-year period

High Alternative--includes all activities shown under the low and moderate alternatives with the following changes:

- 6 - increased timber supply by the equivalent of 29 billion board-feet over a 10-year period

Intensive Timber Culture

Provide the knowledge and technology necessary to increase the growth and yield of desired species consistent with environmental standards. This research will provide for:

Low Alternative

- 1 - a one-third increase in commercial timber growth in 25 years
- 2 - improved quality and lower cost of forest products
- 3 - more effective use of the productive capacity on public and private forests in meeting national needs
- 4 - reduction of pressure to harvest timber on unsuitable areas

Moderate Alternative--includes intensification of activities shown under the low alternative with the following specific changes:

- 5 - a 50 percent increase in commercial timber growth in 25 years

High Alternative--includes highly intensive efforts on activities shown under the low and moderate alternatives with the following specific changes:

- 6 - doubling of commercial timber growth in 25 years

Insect and Disease Assessments

Identify, assess, and predict the impacts of destructive insects and diseases. This program will provide the knowledge needed for:

Low Alternative

- 1 - identification, assessment, and prediction of impacts of only one or two of the most damaging forest pests
- 2 - limited pest control actions

Moderate Alternative

- 3 - identification, assessment, and prediction of the cumulative net effects of the major destructive insects and diseases on timber production and related resource uses and values
- 4 - more precise definition of needs and priorities for additional research and for pest control actions, as well as benefits and costs, resulting from such actions

High Alternative--includes improved capabilities for rapid and accurate accomplishment of items shown under the moderate alternative plus:

- 5 - better understanding of the concept and practical implications of pest management programs

Pest Management Systems

K

Develop integrated pest management systems that are ecologically sound and environmentally acceptable. This research will provide for:

Low Alternative

- 1 - development of integrated systems for managing one or two major forest pests (gypsy moth and Dutch elm disease)
- 2 - forest pest control actions for other pests that would continue to rely heavily on toxic chemicals

Moderate Alternative. includes all items shown under the low alternative with the following changes:

- 3- pest control actions for forest pests that include a more flexible mix of cultural, biological, and genetic controls and that rely less on toxic chemicals

High Alternative--includes all items shown under the moderate alternative with the following additions:

- 4 - development of integrated pest management systems for major forest pests including: Douglas-fir tussock moth, annosus root rot, larch casebearer, dwarf mistletoe, southern pine beetle, fusiform rust, spruce budworm, oak wilt, and western bark beetle
- 5 - simulation models to integrate prevention and control techniques that are environmentally acceptable
- 6 - reduced use of toxic chemicals and increased effectiveness in their use
- 7 - increased timber supply by reducing pest impacts 25 to 50 percent
- 8 - improved productivity, value, and usefulness of all forest-related resources
- 9 - increased effectiveness and predictability of forest regeneration practices

Protection of Wood in Stumpage and Use

L

Reduce losses in quality and quantity of wood in storage and use and extend the service life of wood in use. This program will:

Low Alternative

- 1 - reduce losses in quality and quantity of wood in storage and use and extend the service life of wood so that annual replacement costs are reduced by 10 percent providing that presently available pesticides and preservatives can continue to be used
- 2 - develop new technology for reducing loss of wood in use

Moderate Alternative--includes all activities shown under low alternative with the following addition:

- 3 - provide new materials and techniques, such as safer pesticides and preservatives, microbials, attractants, repellents, and treatments, to alter wood composition that pose no hazard to the environment or to human health

High Alternative--includes all activities shown under the low and moderate alternatives with the following additions:

- 4 - extend life of wood in storage and use by at least one-third, thereby significantly extending the Nation's timber supply and reducing annual replacement costs of wood in structures by 50 percent or more
- 5 - increase use of environmentally acceptable methods for managing wood-destroying insects and micro-organisms.

Fire Prevention and Hazard Reduction

M

Develop methods to reduce the occurrence of wildfires. This research will provide for:

Low Alternative

- 1 - limiting number of man-caused fires to not more than a 20 percent increase over current levels, despite sharp increases in use of forest land
- 2 - holding fire damage to present levels
- 3 - maintaining fire control costs of a level not more than 80 percent above current levels despite increasing numbers of fires and inflationary pressures

Moderate Alternative--includes all items shown under the low alternative with the following changes:

- 4 - holding man-caused fires at present levels despite increasing use of high-risk areas by the public
- 5 - minimizing escalation of fire-fighting costs by adaptation of more efficient technology

High Alternative--includes all items shown under the low and moderate alternatives with the following changes:

- 6 - one-third reduction in man-caused fires in high-risk areas
- 7 - fuel management techniques to reduce by 25 percent damage to natural resources from fire by decreasing both acreage burned and the fire intensity on the land that does burn
- 8 - elimination of excessive cost of "standby" and emergency fire forces now required by the combination of peak fire occurrence loads in areas of inherently high fuel hazard

Fire Detection and Suppression

N

Develop technology to improve efficiency of fire detection, to predict fire behavior, and to increase efficiency of fire control. This program will:

Low Alternative

- 1 - permit development of components for a complete and integrated detection and suppression system

Moderate Alternative

- 2 - hold fire damage to present levels by increasing efficiency of suppression forces
- 3 - provide an optimum design for prevention-detection-attack systems
- 4 - provide guidelines for more economical fire suppression

High Alternative--includes all items shown under the moderate alternative with the following additions:

- 5 - reduce the possible occurrence of large destructive forest fires through the development of new methods and equipment that will:
 - 6 - improve the reliability of fire detection systems
 - 7 - improve the effectiveness of initial attack and suppression methods

Recycling Sewage and Effluent Waters

Provide the technology to: (1) recycle and reuse various forest, industrial, and municipal waste material on forest and rangeland; (2) select environmentally safe waste treatment disposal land sites; and (3) enrich, improve, and irrigate forest and range land for potentially greater site productivity. The research will:

Low Alternative

- 1 - be limited to the Northeastern and Lake States area
- 2 - lower some aspects of treatment-disposal costs
- 3 - provide limited technology to increase onsite productivity for nutrients and irrigation water

Moderate Alternative--includes all items shown in the low alternative with the following changes:

- 4 - aid municipalities in northern and northwestern States to achieve water-quality standards
- 5 - lower treatment-disposal costs, especially from high-density recreational areas
- 6 - provide technology to recycle and conserve resources and increase on-site productivity from nutrients and irrigation water

High Alternative--includes all items shown in the low and moderate alternatives with the following additions:

- 7 - provide guidelines for the protection of the environment (air, water, soil, and biota) from sewage and other effluent waste disposal
- 8 - lower treatment disposal costs for municipalities, small communities, and industries
- 9 - provide esthetic improvements such as open space preserves and greenbelt areas
- 10 - develop guidelines for greenbelt fuelbreaks for fire protection
- 11 - provide means for reclamation and restoration of degraded lands
- 12 - develop methods to recharge aquifers

Reducing Impacts of Man's Activities P

Reduce the impact of man's activities on forest environments. This research will provide knowledge for:

Low Alternative

- 1 - some reduction of environmental pollution from toxic pesticides
- 2 - limited improvement in environmental quality by more effective use of trees that can tolerate or ameliorate atmospheric contaminants
- 3 - minimum technology to detect and assess sediment production and transport in forest environments

Moderate Alternative

- 4 - major steps in the development of less toxic pesticides and improved application technology
- 5 - rapid assessment of acute and chronic effects of air pollutants on the major tree species and development of guidelines for selecting individuals or species most tolerant and useful for revegetation of damaged areas
- 6 - reduction of nutrient loss from watersheds
- 7 - reduction of stream pollution caused by erosion and sedimentation

High Alternative--includes all items shown in the moderate alternative with the following additions:

- 8 - reduction of environmental pollution by use of less toxic materials and safer, less frequent treatments
- 9 - improved environmental quality by more effective use of trees to ameliorate atmospheric contaminants
- 10 - assessment of chronic effects of air pollutants on Forest ecosystems
- 11 - improved surface water quality
- 12 - prevention or abatement of siltation of reservoirs and eutrophication of lakes
- 13 - protection of aquatic life

Minerals Development Q

Develop criteria for minimizing environmental and socio-economic impacts of mineral development including alternative engineering, rehabilitation, and planning procedures. This program will:

Low Alternative

- 1 - improve rehabilitation of disturbed areas and rebuilding of range and wildlife habitats on a limited scale in the Appalachians and two areas in the West, primarily through revegetation methods
- 2 - reduce mining-caused erosion and sediment in streams in the same areas.

Moderate Alternative--includes all items shown in the low alternative with the following additions:

- 3 - rehabilitate, by both vegetational and mechanical means, areas surface-mined in several western ecosystems
- 4 - provide alternatives for longer range management of rehabilitated land
- 5 - estimate mining impacts on rural community development
- 6 - provide knowledge for improved administration of minerals development
- 7 - provide guidelines for improving rural and community development and stability in mining areas

High Alternative--includes all items shown in the low and moderate alternatives with the following addition:

- 8 - allow exploration and extraction of needed minerals to help meet the Nation's energy needs while protecting important environmental values in both the Eastern and Western United States

Environmental Amenities

R

Develop new methods of managing natural resources as environments for living, working, and recreation with emphasis on environmental amenities. This research will provide:

Low Alternative

- 1 - methods of landscape design
- 2 - methods of managing visitor use of wilderness
- 3 - basic data defining desert ecosystems and their critical (fragile) components
- 4 - implementation of the recently developed warning system for avalanches
- 5 - information for maintenance and renewal of existing (aging) Plains shelterbelts

Moderate Alternative--includes all items shown in the low alternative with the following additions:

- 6 - landscape analysis methods and improved landscape design methods
- 7 - information necessary for preserving and managing natural ecosystem in wilderness
- 8 - evaluation of man's impact on desert ecosystems and rehabilitation alternatives
- 9 - knowledge to further refine the avalanche warning system and other methods of managing avalanche areas
- 10 - information for selection and improvement of plant materials for establishing or replacing shelterbelts

High Alternative--includes all items shown in the low and moderate alternatives with the following additions:

- 11 - methods of quantifying scenery values
- 12 - better ways of handling landscape esthetics in land-use planning

- 13- alternatives for protection and preservation of the wilderness resource
- 14- guidelines for effective use and management of wilderness for visitors' enjoyment
- 15- methods for prevention of loss of lives and property to mountain avalanches.
- 16- guidelines for preservation, restoration, and controlled use of fragile desert environments
- 17- ways to reduce wind erosion and increase production of plants and animals in the Great Plains

Recreation Management

Develop new knowledge to improve the effectiveness of providing and managing outdoor recreation opportunities for increasing numbers of Americans. This program will provide:

Low Alternative

- 1- fundamental work on identifying specific benefits to man of recreation and use of natural environments including studies of factors affecting people's choices
- 2- identification and measurement of forest-related recreation activities
- 3- measurement of participation in dispersed types of recreation and identification of critical resource requirements

Moderate Alternative--includes all items shown in the low alternative with the following additions:

- 4- methods for measuring specific benefits from outdoor recreation
- 5- better systems for managing a full array of recreational opportunities
- 6- systems for planning and managing dispersed recreation
- 7- a start on methods of identifying, preserving, and managing archaeological and historical treasures on National Forests

High Alternative--includes all items shown in the low and moderate alternatives with the following additions:

- 8- guidelines for quantifying benefits of outdoor recreation
- 9- the basis for a better mixture of recreational opportunities for satisfying public desires
- 10- more effective programs for serving the public through visitor centers
- 11- improved methods for preservation of irreplaceable archaeological and historical treasures
- 12- a better choice of recreation opportunities ranging from dispersed to concentrated activities

Urban Environments

Develop new knowledge and management guides to serve people's needs for forests and trees in and near major urban areas. This research will provide:

Low Alternative

- 1 - analysis of work needed to define fundamental relations between wild-life habitats, watersheds, and trees on urban-suburban forest areas
- 2 - definition of urban and suburban dwellers' outdoor recreational requirements
- 3 - analysis of research needed on the use of trees to enhance urban and suburban environments

Moderate Alternative--includes all items shown in the low alternative with the following additions:

- 4 - knowledge of habitat requirements for nongame birds and mammals
- 5 - better ways to manage urban forests and open spaces
- 6 - guidelines for better management and use of forests and other open-space areas as recreational and esthetic resources
- 7 - information on motivations of owners of small forest tracts
- 8 - knowledge on the use of trees and shrubs to ameliorate adverse environmental conditions

High Alternative--includes all items shown in the low and moderate alternatives with the following additions:

- 9 - the basis for more and a better balanced mixture of outdoor recreational opportunities in and near major urban areas
- 10 - guidelines for environmental design and modification to improve community and urban environments and minimize adverse effects (e.g., noise reduction)
- 11 - improved quality of water from municipal watersheds
- 12 - guidelines for incorporating private landowners' objectives in formulation of public policy and programs for timber production from small woodlands

Resource Assessment

Collect data on the Nation's forest resources and provide analyses of demand and supply to guide the formulation of forest policies and the direction of programs. The present program will provide for:

Low Alternative

- 1 - complete reinventory of the Nation's timber resources at the current cycle which varies from 10 to 20 years from State to State
- 2 - preparation of periodic analyses of supplies and demands for timber and timber products at intervals of about 10 years
- 3 - continuation of present research on techniques for reducing the costs and increasing the effectiveness of surveys of timber resources

Moderate Alternative--includes all items shown in the low alternative with the following additions:

- 4 - reducing the nationwide inventory cycle for timber resources to 10 years
- 5 - intensifying the survey of timber resources to provide more localized data
- 6 - development of methods for inventorying nontimber renewable forest resources
- 7 - evaluating the effect of various intensified management practices on future timber supplies
- 8 - preparation of periodic analyses of supplies and demand for selected nontimber renewable forest resources

High Alternative--includes all items shown in the low and moderate alternatives with the following additions:

- 9 - reducing the inventory cycle for timber resources in the South to 5 years
- 10 - intensifying the survey of timber resources to provide reliable county data for all heavily forested counties
- 11 - surveys of nontimber renewable forest resources at intervals of roughly 10 years
- 12 - preparation of periodic analyses of supplies and demands for all renewable forest resources at intervals short enough to keep the analyses current

Evaluation of Resource Management and Market Development

Develop more efficient ways of managing forest resources and marketing forest products. This program will provide:

Low Alternative

- 1 - methods for evaluating land management alternatives and investments in producing forest commodities
- 2 - criteria for guiding investments in timber production in four major forest types
- 3 - operational guidelines for use by land managers in preparing multiple use management plans and in making management decisions
- 4 - improved efficiency in harvesting and marketing the timber crops produced on private forest land
- 5 - evaluation of opportunities for improving local economies through expansion of timber supplies and wood-using industries in five or six major rural development areas

Moderate Alternative--includes all items shown in the low alternative with the following additions:

- 6 - criteria for guiding investments in timber production in 10 to 12 major timber types
- 7 - guides for investments in selected nontimber renewable forest resources

- 8 - accelerated work on the development of operational guidelines for multiple-use management
- 9 - evaluation of responses from private forest landowners to various kinds of public and private forestry assistance programs
- 10 - planning methods for integrating public and private development of recreation opportunities
- 11 - development and evaluation of more efficient and lower cost methods of processing, distributing, sale, and use of timber products
- 12 - evaluation of opportunities for improving local economies through expansion of timber supplies and wood-using industries in six to ten major rural development areas

High Alternative--includes all items shown in the low and moderate alternatives with the following additions:

- 13 - criteria for guiding investments in timber production in all major forest types
- 14 - evaluations of alternative sizes and combinations of forestry programs that would effectively and cheaply supply forest products
- 15 - methods for program formulation and land-use planning for both Federal and State Agencies
- 16 - guides for investments for all nontimber renewable forest resources

Basic Hydrologic-biologic Processes \ \

Develop new knowledge of the basic physical, chemical, and biological processes that relate to the management of forest and range watersheds and to the production and diversity of a variety of ecological systems. This research will provide:

Low Alternative

- 1 - basic information on
 - (1) hydrologic processes in forest and range watersheds
 - (2) nutrient cycling and outflow for a limited number of managed ecosystems
 - (3) management impacts for a minimum number of managed ecosystems
- 2 - knowledge of basic soil nutrient and water-quality factors
- 3 - quantification of water losses and other hydrologic factors

Moderate Alternative--includes all items shown in the low alternative with the following additions:

- 4 - guidelines to help land managers to use basic soil nutrient and water-quality factors to reduce and control nutrient losses and maintain high-quality water
- 5 - better understanding of ecological subdivisions of the major forest and range types

High Alternative--includes all items shown in the low and moderate alternatives with the following additions:

- 6 - a stronger scientific base for improving management techniques to ensure regeneration, survival, and growth of desired species and types, both plant and animal
- 7 - better estimates of the increases in productivity attainable through modification of nutrients, water supply, canopy structure, species composition, and other factors

Fish, Wildlife, and Livestock Ecology X

Provide fundamental knowledge of the environmental requirements of fish, wildlife, and livestock and to develop ways to effectively integrate the management of these resources with other range and forest resources. This research will provide for:

Low Alternative

- 1 - predicting the effects of certain man-caused disturbances on wildlife populations and wildlife interactions (studies will be limited to the impacts of livestock grazing, fire, and timber management on wildlife inhabiting selected regions of the United States)
- 2 - identifying the habitat requirements of threatened species of wildlife found in forests and on rangeland

Moderate Alternative--includes all items shown in the low alternative with the following additions:

- 3 - predicting the effect of natural and man-caused disturbances on fish and wildlife populations and wildlife interactions (research will be expanded to include the impacts of other disturbances, such as insects, disease, and pollution, on the habitats of fish and wildlife in selected regions in the United States)
- 4 - identifying the habitat requirements of threatened species of fish and wildlife (research will be expanded to provide the knowledge for maintaining, restoring, or improving the habitats of species of fish and wildlife in greatest danger of extinction)
- 5 - increasing livestock production on rangeland through better integration with other uses

High Alternative--includes all items shown in the low and moderate alternatives with the following additions:.

- 6 - increased supply of livestock forage by improved management systems
- 7 - estimates of amenity and other social values of fish, wildlife, and plants
- 8 - restored habitats and reduced competition between introduced and native biota
- 9 - management systems to protect and restore habitats of threatened species of fish, wildlife, and plants

Timber-related Crops Y

Increase rural employment and income by increasing the production and value of timber-related crops. This research will provide for:

- 1 - maintenance or an increase of primary and supplementary income opportunities for approximately 50,000 people in forested areas
- 2 - more effective use of forests for production of naval stores and maple sap
- 3 - maintenance of current quality of costs of naval stores and maple sap

Moderate Alternative--includes all items shown in the low alternative with the following changes:

- 4 - maintenance or an increase in primary and supplementary income opportunities for approximately 80,000 people in forested areas
- 5 - more effective use of forests for production of Christmas trees

High Alternative--includes all items shown in the low and moderate alternatives with the following additions:

- 6 - more effective use of the forests for production of medicinal plants
- 7 - improved quality and reduced costs of timber-related crops
- 8 - evaluation of opportunities for joint production of timber-related crops and other forest resources.

Narrative Comments of Respondents by Systems

The following pages display in summary fashion what the public said about the 25 systems, the alternative levels of low, moderate, and high, and the specific items within the alternatives, they also display a broad range of comments on activities of the National Forest System, State and Private Forestry, and Forest Research. The comments are summarized by systems except for General Comments identified in the final section of this document. Comments that were made by Forest Service personnel who responded to the EPFF are identified on the left side of the page by a double X. The Forest Service did not eliminate any comments of respondents by determining that some comments were not as substantive or important as others. All comments are displayed by systems (and General Comments) in so far as they offered a different perspective or a variance of view from other comments. However, thousands of comments were received and analyzed that were identical in nature (though not necessarily in exact words) to those displayed in the following pages. It should be borne in mind that the first pages of comment within each system usually speak to items specifically within that particular system as written in the EPFF document.

RESOURCE - Land and Water System

- * X X The figures for stabilizing sheet and gully erosion should be higher. The need for conservation will be high regardless of the level of timber output, and sedimentation will affect downstream values and expenditures. Consider converting some timber land to other uses - recreation, wildlife.
- X X Stabilization of areas with sheet and gully erosion is most important, particularly with logging roads on steep slopes where rainfall is high (PNW). The erosion due to logging roads is tremendous.
- X X Very important to Nation that (1) soil be saved for growing and not eroded downstream to further degrade rivers, irrigation systems, fisheries, etc.; (2) land be put into production and not left partly used (such as temporary roads); and (3) assistance be given to State and local agencies in their planning efforts.
- X X If the rate is really this high, about .7 of a foot of soil loss per year, there would be no way of complete reduction in 1 year short of paving.
- X X Mass erosion is a major problem on all mountainous forest lands, producing damage to site productivity, fisheries habitat, water quality, and cultural "improvements" such as roads, habitations and water control structures. It is a major area of concern in forest land management, but this subject is not discussed, noted, or emphasized anywhere.
- X X Have more controls done in the forests to prevent erosion and siltation; discourage dams unless there is no alternative for flood control.
- X X Can't improve water quality unless we have enforceable laws regarding pollution.

I am interested in how the Forest Service proposes to comply with the Federal Water Pollution Control Act of 1972 when, on page VIII-18, they acknowledge that some additional sediment may result.

To even consider letting irreplaceable soil wash away from sensitive lands because somebody chooses the low option, strains credulity. We believe this type of thinking is why the Forest Service has lost so much respect from the public in general.

Question the term "stabilizing banks" and would like to see this term enlarged upon. If it means the type of stabilization that the Corps of Engineers engages in, I would question such activity.

Hopefully, "treatment" of streams does not imply channelization.

* XX Identifies comments made by Forest Service personnel who responded to the EPFF.

Work to stabilize streambanks and debris removal should be done judiciously to avoid changes in animal habitats and land use.

Stream and shoreline stabilization should be "natural." Any "stream channelization" type project such as that conducted by the SCS to be prohibited. Where is the EIS for this plan? There should be public hearings on this before any planning funds are spent.

No canals or speeding up of water flow. Recommend greenbelt, plant life, trees along all streams to slow down flow of water. Keep streams natural.

The preservation of the land, water, and air resources of our National Forests are primary. This means all of the watersheds must be preserved and restored if need be to their native state.

X X Erosion control and water quality are high priority because they are irreplaceable and basic to utilization of the National Forests.

X X This is our basic resource and how well we take care here will determine how well we can show the public that we "can" manage these lands.

The demands for clean, clear, unpolluted water is going to increase.

X X The water quality must be maintained and improved for the benefit of fish life and human life.

X X Soil stabilization should be given first priority over all other programs in the Land and Water System.

X X Soil needs to receive greater emphasis as the basic resource for timber production.

X X More and more land is becoming eroded. This is primarily valuable farm land.

The statement that increased water yields after cutting only continues about four years is a case in point. Studies at Coweeta and elsewhere have indicated that these effects following clearcutting in eastern hardwoods last in excess of 20 years, on a dwindling scale to be sure. These increased yields occur principally during the late summer months, when they are most needed. (See chart, page 431, "Report of President's Advisory Panel on Timber and the Environment.")

Water quality and sediment improvement compared to what? How is this related to timber production?

X X Reclamation of current problems is very expensive and prevention of potential problems should be the main emphasis.

Increased money should be spent in preventive techniques and not totally in restoration of damaged areas.

XX Present land and water sufficiencies on the National Forests can probably be maintained at all proposed levels of activity, but the restorative measures have to do with quality land management and cannot or should not be deferred indefinitely owing to the basic nature of the land and water resources. It will be difficult to demonstrate dollar returns. Perhaps the main value will be in the impetus to improved management all across the spectrum. Another factor to be closely considered in the western forests of the arid or semiarid regions; the growing demands for M&I water as against water for irrigation.

Restore the maximum amount of land disturbed by man.

Clearcutting in Alaska is destroying watersheds. There is little evidence of soil or water protection as cutting continues on steep slopes with unstable soil. Clearcutting continues to the banks of streams and to the shorelines of lakes and salt water bodies. Stabilization treatment and removal of debris is important, but prevention is of even greater importance.

Stop the practice of clearcutting which degrades water quality and increases turbidity.

Programs will be undertaken to halt erosion from previously clearcut, plowed, and denuded areas.

In Humboldt County, sediment production is high and has caused damage to anadromous fish.

Before any National Forest lands are developed or managed for water production, two objectives must be met first: restoration of already damaged lands and completion of land use planning units.

Not all water improvements are made by specific projects. Much is done by control of other resource systems.

The soil and water are held in place by vegetation, and this means doing all possible to ensure that soil and water are in no way detrimentally affected by poor grazing, timbering, or mining practices.

We suggest increased emphasis on watershed improvement programs that protect forest lands and increase the yield of water from these great watersheds on a sound conservation basis.

Varying the National mix with a thrust toward maximizing water production in critical regions or critical mineral development might also be considered.

I do not advocate closing all domestic watersheds but feel that multiple use of these watersheds needs very close attention.

Hydrologists and soils specialists are needed on the staff of the Forest Service.

In the middle paragraph of page VII - 43 is discussed the possible adverse effect on water yield and quality that might result from increased timber harvesting under Forest Service cooperative management programs. This appears to be speculation, and should either be supported by watershed and hydrologic research results, particularly with respect to water yield, or deleted.

X X High supply alternative needed to maintain and improve the N.W. fisheries habitat and set a better example to industry and for the newly enacted Washington State Forest Practice Act.

The next draft should specify in more detail the method by which you would "stabilize 300,000 acres of active sheet and gully erosion."

X X Page VI-10: I feel the graph portraying sediment reduction would be more meaningful if you showed the total present sediment load in million tons and then the reduction by each management level. Reason: is a 300 million ton reduction, 5 percent or 50 percent of total or 1 percent.

In the arid Southwest, the enhancement of the quantity and timing of water flowing from the National Forest lands is of major concern and would hopefully outweigh some of the conflicting stabilization.

The high supply alternative lacks two important ingredients: We see no mention of watershed improvement to supply the 23 percent increase in water which the study indicates will be needed in the next decade. We do not see provisions for vegetative manipulation or controlled burning to remove inefficient water-consuming plants, etc.

Evaluate harvesting systems for relative impact on water quality.

X X Selection of the moderate or high alternative under timber would probably make it impossible to maintain the sediment reduction goal of the land and water system.

One way to stop stream washing is to use smaller clearcuts, thus slowing spring run-off.

I think the hazards of timber activities for soil and water have been strongly played down; you don't really know the answers to a lot of these things and it would be prudent and in the long term public interest to warn rather than soothe. I just don't believe the optimism expressed here. In the first place, we have not had enough "intensive" timber management to cause an impact.

There is little or no discussion of alternatives for increasing water yield and quality, insofar as compatible with other forest values and uses.

Our forests should have the watershed protection made in a mandate for in all activities.

It makes sense to stabilize and treat lands to improve water quality and reduce erosion, but water quality can also be improved by doing less of other things on those lands; i.e., water resources development projects

Under activities common to all alternatives, question whether Forest Service should regulate the "quantity and timing of water flowing from the National Forest lands." This could have drastic effects on lands affected by the water.

Water quality improvement involves much more than sediment reduction. Incorporate plans and program alternatives for use of chemicals, road-building methods, etc.

It is of utmost importance to protect and improve the source, supply, and quality of the water resources of our Nation.

A major resource of the National Forests is water; watershed management provides a steady, high quality water supply for municipalities; however, reservoirs within National Forests are not necessary or desirable. The phrase "intensifying administration of mining claims" is vague. Clarification of terms is important before comments can be effective. Treating gulley erosion, decaying stream banks is treating the symptom instead of the cause.

- X X Add activities to insure that new developments do not result in additional acres of sheet and gully erosion, unstable stream banks, and surface mining on all National Forests and National Grasslands.
- X X Land use planning is vital because of the finite amount of available land.
- X X This alternative is essential on much of the high production water areas of Central Idaho.
- X X Do not let the forests become easy land acquisitions for reservoirs of any type; e.g., put a halt to the proposed Snake River dam; if at all possible, acquire the oil, gas, and mineral rights when buying the new land.

Identify land-use practices or conditions on inholdings and private lands adjacent to National Forests and Grasslands which impact water quality or other program goals of USFS.

Let nature rehabilitate natural disasters and let the Forest Service rehabilitate the man-made ones.

"Positively enhance through scientific management the quality and timing of water flowing from National Forest lands" raises some concern as to what might be done, and although there would be beneficial results, some doubt as to the environmental costs exists. The "endeavor to assure that water resource development proposals are compatible" with other values is not sufficiently reassuring.

Many potential hydro-electric sites lie in the Tongass National Forest. These should be utilized as demand for non-polluting energy increases.

X X In the Land and Water System, one of the activities listed is to "promote more effective use of the forests for municipal water supply," etc. I think this is an area in which we must tread lightly. The example that comes to mind is near Phoenix, Arizona where it appears that the Salt River Project is putting pressure on the Forest Service to push ahead quicker than we know how with various vegetative conversion projects in order to get more water yield into the municipal watershed.

X X It's also hard to believe that 1 percent of the National Forests have active sheet and gully erosion.

Incorporate environmental impact analysis on water resource development projects; i.e., structural vs. nonstructural alternatives.

Keep ground water clean.

Provide erosion control only as necessary to protect man-made structures such as bridges and culverts. The moderate level activities should not be necessary assuming proper timber management and recreational management techniques are used.

X X Before roads are considered for obliteration, they should be carefully evaluated on the basis of their current and potential need for public access. Where access is to the public benefit, add roads to the National Forest transportation system.

I also think that all land should be productive in some way. Obliterating as many unneeded loads as possible would help greatly to return the land to productivity.

X X It's hard to believe that there are this many miles of unneeded roads and harder yet to believe the cost could ever justify the minute increase in productive base.

Unneeded roads must be closed as a protection for wildlife.

Believe that the natural beauty of forests is somewhat lost in the presence of unsightly dirt roads.

Your admission of 4,000 miles of unneeded roads confirms my opinion that many roads should never have been constructed in the first place.

We suggest that where suitable, you work in close conjunction with your research program to turn some of these roads and acres damaged by mining and prospecting into trails and obstacle courses for motor cyclists and four-wheel drive enthusiasts.

Would lobby extensively against the addition of 5,000 roads as indicated in your common area. What is a "road" anyhow? How long is a "road?"

Not clear how conflicts between obliteration of unneeded roads in this system and the initiation of road construction under Timber Resource System will be handled. That is, will some roads obliterated under Land and Water Resource System create problems for ingress and egress under Timber Resource System?

X X Most roads do not take forest land out of production. Obliteration of all "unneeded" roads often means that we reconstruct higher standard road in its place.

The term "obliterate" should be clarified in regard to the old roads now in existence.

"Obliterating" roads indicates more earth moving and potential soil movement into streams. Revegetating the roads in place after physically limiting access would create less soil disturbance.

All temporary logging roads should be planted to trees even without the "obliteration" policy.

Before any roads are obliterated in this area or additions are made to the National Wild and Scenic Rivers System in Montana, careful consideration should be given to existing economic interests and area residents' needs.

Obliterate unnecessary roads and to restore lands disturbed by mining activities. Restoration of land damaged by mining activities should be paid for by the mining interests themselves, not by the general public.

Most interested in preventing access to forest lands for State and Federal highway projects.

I do not want a great proliferation of roads as they will lead to over-use and thus damage the wilderness. There is danger that they will increase erosion and siltation problems.

Close forest roads during wet conditions.

Mining is included under this system, yet all the alternatives suggested have the same size mining program. We feel there should be at least three alternatives for that factor.

The Nation's mineral supplies are reaching critical levels and the Forest Service should encourage exploration and prudent development.

By "intensifying administration of mining claims", development of environmentally harmful claims should not be accelerated. Clarify what "administration" means.

Take advantage of the surface exposure in clearcut and burned-over areas to invite geological evaluation and possibly some structural cone drilling to correlate surface geology with stratigraphic and structural underground conditions. This process would take advantage of the vegetative removal to supply much needed information useful to resource inventory and planning. Industry might be interested in participating in the program at minimal expense to the taxpayers or the data might be collected for public information.

Would like to see all of the land disturbed by surface mining to be restored to its former condition. This should be paid for by the mining company. I am also in favor of severely restricting surface mining since damage due to this activity is high. Also support closer regulation and control of permit holders since National Forest land is public and must be protected from even the slightest abuse by individuals and companies. Would also like many areas added to the National Wild and Scenic Rivers System. I would like to see more of the land in the National Forests preserved and protected for future generations' enjoyment.

Miners and prospectors should be required to restore their own devastations and they should not be allowed to plan their own access roads.

The lands use proportion of actual surface use in this mining is small relative to the social benefit. The presentation emphasizes the negative impact of land use and ignores the beneficial impact of product.

Environmental education in mineral management would benefit Forest Service personnel as well as the public attitude.

Many Americans think of mining as an exploitive activity which, creating nothing, 'scoops out of what nature has stored in it, mutilating vast areas of land in the process. The truth is all mining activity in the United States since 1776 has disturbed less than 3/10 of one percent of our land surface and 1/3 of the disturbed area has been reclaimed or naturally healed.

Insofar as mineral resources are concerned, the USFS appears to regard exploration and production as evils to be avoided if possible and minimized if unavoidable. Note, on page 27, "minimizing ----- socio-economic impacts of mineral development." I should think the objective would be to "optimistic"; the socio-economic impact"; an objective neatly arranged for by the free market mechanism if meddling bureaucracies can be out of the act.

Table 1, pg. 5, Minerals and Energy, reads in part, "most of our non-ferrous metal reserves" - this statement is too vague and should identify the metals in question. There are dozens of nonferrous metals, and I doubt that it applies to most of the important ones.

Mention should be made of important nonmetallic mineral deposits - clay, shale, sand and gravel, limestone and dolomite, and other "stone"

resources. They will become increasingly important as urbanization continues and large private holdings are dissolved.

Reduce extraction of minerals from National Forest lands.

Bring out the fact that public money must be used to compact mined land. Hopefully, newer mining laws will provide for cleanup and restorative measures.

X X Forest Service not likely to be financed to accomplish these proposed outputs. Mining industry should finance the land restoration caused by prospecting and mining activity; also the administration of claim, location, and development. At present, law permits them to rape and leave with no possible reuse of BIM or Forest Service. Can't improve water quality unless have enforceable laws regarding pollution.

Suggest that no cutbacks be made on "monitoring and intensified administration of mining claims," etc. Furthermore, we are very dubious about the issuance of 12,000 additional permits, particularly for 1,000 recreation facilities.

Very impressed with efforts of National Forest System to intensify administration of mining claims and conduct mineral investigation. There is room for both the Forest Service and the mining business.

Urge extreme caution in increasing mining use of land.

The sections on mineral area management rather encourage mineral development. There obviously must be strong upper level administration pressures in this direction at the current time.

Strip mining has done its best to turn certain wooded and unwooded areas into eyesores.

There should be no surface mining whatsoever in the National Forests. There is enough natural erosion to control.

The intensified administration of mining claims must not only preclude extensive surface damage, but should ensure that no water courses become contaminated with product wastes acids or other harmful substances. Improvement in landownership patterns implies sale or trade.

Only watersheds presently undeveloped should be studied for Wild River classification to avoid unnecessary conflicts with the many high priority uses of the National Forests.

Potential additions to the National Wild and Scenic Rivers System should be geared to their proximity to existing Wilderness Areas and not agricultural or grazing zones.

It appears advisable to study all 30 watersheds at the earliest possible date under any level of activity in order to prevent future change that might unalterably destroy the wild and scenic values of a watershed.

We feel that the study of waterways as "Wild and Scenic River" candidates should be of a higher priority at all levels.

More wild and scenic rivers will help to assure that a few beautiful areas are saved from civilization in productive areas.

X X We do not need more additions to the National Wild and Scenic River System.

X X There is not an accurate measurement of output benefit. We can't afford the single use luxury of Wild and Scenic River Systems.

X X All three alternatives should have more emphasis on stabilization and restoration of the flow resources and less emphasis on studying additions to the Wild and Scenic Rivers.

National and Wild Scenic Rivers System be treated separately under "Recreation and Wilderness System."

X X To make effective use of any level of financing, plans need to be laid well in advance.

X X I question the need for "60 interdepartmental USDA Planning Programs." It seems all the agencies do any more is planning.

X X The assistance to state planning and multi-county organizations and interdepartmental and USDA planning programs is not critical in this areas. This should be at the low level supply alternative.

If any cutbacks have occurred in the area of land use plans and inventories, then these activities should be among the first to be increased.

Would suggest that all of your alternatives for the Land and Water System be delayed and not be implemented (except for on-going activities and policies under existing laws) until the Land Use Unit Plans can be formulated.

Restoring land to productivity is of the greatest importance for future generations, as is both short and long-term planning to ensure wise use of "resources."

Consolidation of "checkerboard" land holdings is important.

We support the disposal of a limited amount of federal lands, including forest lands, into non-federal ownership. First, we would suggest that those lands which are needed for state, county, and local governmental uses should be transferred out of federal ownership; second, those lands that were once in private ownership which are suitable, should be returned for private ownership; third, those parcels of land, frequently called "isolated", which are too small for efficient public management, should be converted to private ownership.

The rights of individual owners are not given enough consideration. We question the statement "Improve land ownership patterns to achieve efficiency in administration and management" as this will possibly lead to a takeover of additional private lands which we don't want to happen.

Would commend your sense of direction in completing comprehensive land-use management plans for 75 percent of the National Forest Service Lands by 1979. This does constitute planning and policy direction on the utilization of activities on the National Forest System.

X X The completion of comprehensive land use plans (75 percent by 1979) is overambitious because of the present lack of inplace data. Unit planning based on sampling is a waste of time. Detailed plans require inplace data, not statistics. The dollars now sunk in planning below the forest plan should be spent on accurate inplace data collection and multidiscipline prescriptions for all treatments planned, including transportation systems.

Do not feel that the Forest Service has the expertise or capability to do 75 percent of the land use plans by 1979. Many forests have more or less spun wheels in the last four years in the long-range planning effort and the machinery is not adequate to complete this activity at least not under the low alternative. Land use planning is just a step in the total planning process. The results of land use plans take the form of functional development, plans, and programs. If these are to be completed also, then manpower, time, and commitment to planning will have to be increased over what exists.

X X Additional finances are needed if we are to accomplish 75 percent of our land use plans by 1979. Cannot do with present finances without significant sacrifices to other systems.

X X Question that much more than Activities common to all alternatives can be accomplished with this increased level of financing. Land use planning and more intensive administration of mining claims under new regulations are cases in point. Increased environmental awareness of the public is, in my estimation, doubling our costs to administer National Forests System lands.

We would favor studying any watershed in addition to the 24 meriting study. Possibly less of a study so that all areas are given due consideration.

Maintenance of present levels of funding as in the low or moderate programs will seriously hamper long-range land-use planning both at national forest and cooperative levels.

Assisting local organizations to plan and install forestry measures for watershed protection is an absolute must! Why can't National Forest System interest the many, many environmentalists in rehabilitation of sites of natural disasters?

X X High level necessary for any increase in emphasis on resource production to endure long-term stability of our land. Need ground water surveys - assume part of data for comprehensive land use plans.

Permits such as summer homes, "wilderness adventure" programs like Outward Bound and the National Outdoor Leadership School, should be discontinued in wilderness areas.

X X Is the 1,000 increase in recreation permits consistent with our policy of encouraging recreation development on private lands?

X X No new individual special use permits should be issued. Phase out all recreation residences.

X X I doubt that we can "assure orderly occupancy and use of about 61,000 holders of special land-use permits" at this level of funding. Considering environmental analysis and inspiration needs on new and existing mining, utility, and pasture permits alone, I question present management abilities in this task, as discussed in VIII*9.

X X Special use permits should be limited to 500,000 with an examination to determine old permits that should be cancelled. Doubt that state planning agencies need or want the assistance outlined in any of the alternatives. Counties need it, but most don't want it.

X X Coordination of special uses with landownership long-term plans needs a lot more study instead of just stopping the "spot fires."

X X There is no estimate of the magnitude of the total job that needs to be done nor of what percentage of this total each alternative represents. Such estimates would make it easier to choose an alternative.

X X The activities for the different alternatives vary only in their levels. These levels do not reflect any perspectives that a respondent is likely to have. If a specific area warrants stepped up or intensive management, it should receive it - it cut that is offered could be placed somewhere else.

X X It would be helpful if the needed work units could be displayed in addition to the units that would be accomplished under a particular alternative; i.e., does the obliteration of 4000 miles of unneeded road under the high alternative represent 1 percent, 10 percent, or 100 percent of the total work needed?

The EPFF should indicate the volume of water presently being produced from the National Forests, and its uses. It should project future water supplies and needs and describe programs to meet the needs.

More information is needed about totals in order to gauge the adequacy of the activity levels. To illustrate, what is the total acres of active sheet and gully erosion on National Forest lands requiring remedial action? Lacking this information there is no way to know if 100,000 acres is adequate for low supply alternative or 300,000 acres for high alternative.

X X Need to aim at the high level in order to get on top of the job. Otherwise, where would we be in 1979? Take 100,000 acres of gully erosion to stabilize under the low option; yet the high option says we have at least 3 times as much area in need of treatment. Do we simply defer all these added acres if we opt for the low option? Think we could switch some items, study 16 watersheds instead of 30 for example; but identify those areas that really need the attention.

X X The low and moderate levels are unacceptable in light of actual acreage in need of reclamation on certain forests, particularly in the East. As an example, on the Wayne National Forest in Ohio there are 9,000 acres within the proclamation boundary that require reclamation. One thousand acres are on existing National Forest ownership. Eight thousand acres are in various individual and corporate ownerships.

Even at the high alternative, the 500 acres of land disturbed by prospecting and surface mining which will be treated does not seem like much land. What percentage of the total acreage which is "disturbed" in this way does the 500 acres represent?

X X Forest Service must exert more leadership in water development projects being planned on National Forest land by other agencies. It appears that many of these large scale reclamation and flood control projects are out of tune with present and projected demands; i.e., energy and food production.

Are the areas to be treated for erosion in the low alternative those areas which are the easiest to treat, the ones which need the most treatment, or those on which the benefit cost ratio will be highest?

X X Cost and benefit ratios would be helpful in evaluating the alternatives. Amenity values should be included. Present level data would help evaluate the alternatives.

X X It seems we are being asked whether we want more of everything, one at a time. Of course; everyone does. But everyone knows there are trade-offs.

I believe the economic law of diminishing returns applies very strongly with accelerated investment; Forest Service projections don't appear realistic.

This must be achieved in a reasonable cost total. Minimum staff and maximum use of continuation for work needed should be the rule.

Carry out the high supply alternative as much as is possible considering cost factors and ecological effects.

X X In Chapter VI, page 11 provides a good example on the left-hand column of the page; each caption starts with "on the National Forests and the National Grasslands." On the right-hand side of the page, one would assume that this is just a continuation, although actually it's a recitation of levels of activity required on non-NFS land.

Overall, your comments and alternatives are too vague, too general, and lacking any concept of definition. They do not seem to relate to a program that is supposed to be long-range in nature.

X X I don't see how anyone with the exception of Washington Office staff would have any basis upon which to recommend any level (at least from the information given here).

X X Show present level.

X X Comments related to pages VI-10 and VI-11, in the Land and Water System. I would like to point out the confusion that exists in these two display pages. Page VI-11 shows three levels of work (Low, Moderate, High) proposed on the National Forests in terms of erosion stabilization, stream and bank stabilization, and other restoration projects. It covers the time period 1975-1979. This implies that one-fifth of the work will be done in any 1 year.

X X Pages VI-10 shows indicator outputs in terms of sediment reduction annually (in 1984). I believe a reader will think that this program proposed on page 11 will result in the sediment reduction on page 10, when this is not the case. There is no relationship between the two pages, but the way it's presented has implied there is. This is confusing.

X X If a relationship is intended, and we were to assume the annual rates of treatment (1975-79) were to continue into 1984, then these pages imply that approximately 80,000 acres of sheet and gully erosion control, 1200 miles of bank stabilization, and 800 miles of obliterated roads would reduce sediment by 300 million tons. This would amount to a reduction of over 1,100 tons per acre, which is really not possible. No matter how one looks at it, the relationship implied on these two pages doesn't exist.

Due to insufficient information, am not able to choose program level.

The low, moderate, and high supply alternatives mention only National Forests and National Grasslands. Nonfederal lands are mentioned under activities common to all alternatives where the level of activity is not specified. May one assume the level of activity on nonfederal lands is the same under all alternatives?

There is no qualitative difference between the low, medium, and high alternatives, so it is difficult to judge between them without statistical information defining the size of the problems. Reference here is to man-made damage in the National Forests. All such damage should be repaired, but it is doubtful that much effort should be devoted to fighting nature.

Following comments apply to all levels in general: (1) There exists a distinct need to include qualitative as well as quantitative changes in the program, moving from the low level to the high level. In other words, shouldn't the high level contain some additional programs which

the low and medium levels do not include?

X X Outputs indicate quantity - what about quality?

X X Why worry about water quality - quantity is stressed throughout the rest of the report; more timber, more cattle, etc. If we are so interested in water quality, why aren't we taking action against all the dams being built? Why aren't mining claims given more attention? They often do more damage than stream erosion.

X X This is basically what the National Forest System is all about and why it was authorized in the eastern United States under special legislation in the first place. Land and water are basic to providing all our other needs. There are many past land use abuses to correct as a result of having been too quantitatively oriented and not enough qualitatively oriented.

X X Sediment reduction sounds good but difficult to quantify for many projects.

X X The indicator output of "water quality improvement in millions of acre-feet" is meaningless and an insult to the intelligence of any competent hydrologist or watershed scientist. How much improvement is necessary to be counted and how far downstream toward the ocean will the improvement be counted? Eliminating 5 tons of salts from a tributary to the Colorado River might be counted as 15 million acre-feet of watershed improvement (flow of Colorado River). Cleaning up a small polluted trout stream which flows 10,000 acre-feet annually might be of much more importance but wouldn't dazzle anyone in comparison to the bureaucratic figure of 15 million. The output of "Sediment Reduction in Millions of Tons" is also unrealistic. It cannot be measured without very great expenditures. Sediment reduction at what point? Ocean deltas, reservoirs, perennial streams, first order ephemeral stream channels, or what?

X X We question whether the activities listed as being common to all alternatives are realistically common to all. It is our feeling that some could be accomplished only under the high alternative; i.e., "positively enhance through scientific management the quality and timing of water flowing from National Forest lands.

X X Page VII-35, paragraph 3, "Only the high supply program provides a reasonable start in correcting these (unsatisfactory soil and watershed) conditions." This is an optimistic but misleading statement. Don't overlook the fact that each system adds new impacts to already deteriorated or not yet deteriorated soil and watershed conditions.

X X On Land and Water System - Activities common to all alternatives: (1) I do not believe it is possible to "intensify administration of 150,000 mining claims, mineral leases, and prospecting permits" or to adequately "improve landownership patterns to achieve efficiencies in administration and management" under the low or moderate alternatives.

Both will take a lot more money to do an adequate job; (2) also, it is not possible to administer additional special land use permits without more money. The money we get now is inadequate; so, how can we do more? The writing is confusing in that it speaks of 12,000 more permits but the figures add up to 17,000.

X X Similarly, if this low level is continuation of present level of "production", I doubt that mining and other uses can be adequately managed at moderate level, as implied under "activities common to all alternatives."

X X Item 28 is unrealistic at anything other than the high alternative.

X X A basic need for the future of our country if public employment (WPA, PWA) become realities; this labor could profitably be used well on erosion control and land stabilization, as well as reservoir maintenance.

We don't need plans written in broad terms for large areas, but rather, common sense implementation of present laws, regulations, and plans.

X X Positive expenditures in this area are readily offset by improper development elsewhere, however, and the interrelationship must be fully considered.

X X This should be the goal while Timber Resource System is being held to a low supply alternative.

X X I fail to see how a program directed by funding to soil and watershed rehabilitation can be effective against any but lands already degraded. I cannot see how high funding of programs only in this area will produce net gains in soil and water conservation and protection. High funding for TM development for example concurrent with high watershed funding could produce a net loss to soils and watershed. We should be honest and plain about this - we cannot always have both!

X X Present rate of increase appears to be not only keeping up, but is also picking up some of the backlog. Other activities could be put in high by keeping this one in moderate.

Increase coordination between United States Forest Service and Soil Conservation Service.

X X Cooperation with states, counties, cities is needed.

X X Push for more state planning bodies to coordinate with Forest Service rather than Forest Service providing direct assistance to planning bodies.

The EPFF should describe the role of other agencies, such as the Soil Conservation Service, with which the Forest Service may cooperate in the management of watersheds.

Reservoir sweeping should not be done where others already and rightfully have the responsibility; for example, Kachess, CleElum and Kachess

Reservoirs on the Wenatchee. This is rightfully a project user responsibility and Forest Service is wrong to allocate funds to the project.

- X X These 3 levels are difficult to evaluate in isolation. The interactions between the various resource systems are obscured. It seems unlikely that the "high level" for timber production would not involve more sedimentation, rather than less. It seems we are being asked whether we want more of everything, one at a time. Of course, everyone does. But, everyone knows there are tradeoffs - more deer mean less livestock forage, more roads and timber mean less salmon, etc.
- X X Continued improvement of programs as has taken place in the past few years has left a mark on the land in that the land is looking better. This program level is realistic and will continue to show improved effects.
- X X Activities in this system appear to be directed toward treating effects (restore, treat, stabilize) when our efforts should be directed toward the cause. We should insure that activities in the other resource systems do not require us to maintain a high alternative in this system.
- X X Believe in the long run this is the highest level that public forestry objective in the United States will permit.
- X X High supply level will be necessary to maintain previous work fully to a high quality and increase outputs to those shown in the low supply alternative.

If we are serious about sustained yield there is no choice - soil erosion and contaminations of water must be controlled. This means many changes in road construction, grazing practices, mining, logging, etc., are necessary in addition to moving ahead with rehabilitation projects where feasible.

The planning document is not a proper vehicle to effect policy revision.

- X X The interactions between the various resource systems are obscured.
- X X If public employment becomes a reality, this labor could be profitably used well on erosion control and land stabilization as well as reservoir maintenance.

Do not let the forest become easy land acquisitions for reservoirs of any type; e.g., put a halt to the proposed Snake River Dams. If at all possible, acquire the oil, gas, and mineral rights when buying new land.

Work on three-fifths of America's forest land depends upon an awareness and understanding of the needs by the landowner and general public as well.

This plan, if we understand it correctly, embellishes the excesses of the 60's with words like "environmental protection." It pushes high production at the expense of the land and the water.

X X The Forest Service must continue to improve its land stewardship. This can be done by sound comprehensive land use planning, improved inventory, greater budgetary and "internal political clout" for non-commodity programs. The soil resource must be maintained and the water quality must be preserved and enhanced wherever reasonable.

Effects of roads on soils are often not temporary at all; once soil has eroded away, it is gone, and it will be a very long time (hundreds of years, at least) until it is replaced - even though you are not losing any more.

Identify critical needs and priorities for research.

X X As long as the activities common to all alternatives are carried out, the moderate alternative will suffice.

X X The order of priority should be: (1) obliterate unneeded roads; (2) restore most disturbed mining sites; (3) provide erosion control on critical areas; (4) stabilize active sheet and gully erosion; (5) stabilize streambanks; (6) Wild and Scenic Rivers; (7) assistance to states.

X X We must keep the sail in place, but some levels of loss are acceptable, providing there is no significant loss of productivity.

A major resource of the National Forests is water; watershed management provides a steady, high quality water supply for municipalities; however, reservoirs within National Forests are not necessary or desirable. The phrase "intensifying administration of mining claims" is vague. Clarification of terms is important before comments can be effective. Treating gulley erosion, decaying streambanks is treating the symptom instead of the cause.

Strict controls on pollution through mining and overgrazing. Recreation facilities should be restricted to minimum needs, namely toilets, drinking water, and not much else. We should discourage the demands of "homes on wheels." Minimize the building of new roads.

There should be no surface mining whatsoever in the National Forests. There is enough natural erosion to control.

It is of utmost importance to protect and improve the source, supply, and quality of the water resources of our Nation.

Maintenance of present levels of funding as in the low or moderate programs will seriously hamper long-range land use planning both at National Forest and cooperative levels.

Believe that the natural beauty of forests is somewhat lost in the presence of unsightly dirt roads.

There is no qualitative difference between the low, medium and high alternatives, so it is difficult to judge between them without statistical information defining the size of the problems. Reference here is to man-made damage in the National Forests. All such damage should be repaired, but it is doubtful that much effort should be devoted to fighting nature.

To even consider letting irreplaceable soil wash away from sensitive lands because somebody chooses the low option strains credulity. We believe this type of thinking is why the Forest Service has lost so much respect from the public in general.

This plan, if we understand it correctly, embellishes the excesses of the 60's with words like "environmental protection." It pushes high production at the expense of the land and the water.

The land and water resources underlie the entire forest system. While timber is renewable on 1-150 year rotations, land is renewable only in geologic time -- 5-10,000 years. Without the land and water base, we have no forests.

Water and land are the all-important resources: even air derives from them. USFS will have to develop a highly sophisticated approach to stabilization to avoid a heavy-handed preemption over other uses and systems.

Before any National Forest lands are developed or managed for water production two objectives must be met first: Restoration of already damaged lands and completion of land use planning units.

We would favor studying any watershed in addition to the 24 meriting study. Possibly less of a study so that all areas are given due consideration.

Oppose dams, snow fences, vaporizers, etc., in wilderness designated areas - and all other major man-built intrusions productive of improved water quality in wilderness areas.

I also think that all land should be productive in some way. Obliterating as many unneeded roads as possible would help greatly to return the land to productivity.

We could argue that stabilizing 300,000 acres from erosion would not be better than 100,000 acres. Use this same obvious logic with all the items listed in the outline.

Carry out the high supply alternative as much as is possible considering cost factors and ecological effects.

The EPFF should indicate the volume of water presently being produced from the National Forests, and its uses. It should project future water supplies and needs, and describe programs to meet the needs.

Another surprising statement is "There are many unsatisfactory soil and watershed conditions that must be corrected. Only the high supply program provides a reasonable start in correcting these conditions."

The EPFF should describe the role of other agencies, such as the Soil Conservation Service, with which the Forest Service may cooperate in the management of watersheds.

Would commend your sense of direction in completing comprehensive land use management plans for 75% of the National Forests Lands by 1979. This does constitute planning and policy direction on the utilization of activities on the National Forests.

Would suggest that all of your alternatives for the Land and Water System be delayed and not be implemented (except for on-going activities, and policies under existing laws) until the Land Use Unit Plans can be formulated.

I hope "stabilizing" banks of streams and removing debris does not mean the use of dikes, impoundments, channelization, etc. Also, deemphasize mineral investigations and unnecessary road buildings.

One way to stop stream washing is to use smaller clearcuts, thus slowing spring runoff.

Unneeded roads must be closed as a protection for wildlife.

Question stabilizing stream banks -- it depends on FS techniques. Oppose channelization characteristic of Corps of Engineers and Bureau of Reclamation projects!

Suggest that no cutbacks be made on "monitoring and intensified administration of mining claims", etc. Furthermore, we are very dubious about the issuance of 12,000 additional permits, particularly for 1,000 recreation facilities.

If any cutbacks have occurred in the area of land use plans and inventories, then these activities should be among the first to be increased.

Under "activities common to all supply alternatives," question whether FS should regulate the "quantity and timing of water flowing from the National Forest lands." This would have drastic effects on lands affected by the water.

Re mineral investigation - unclear what "multiple-use planning" means other than massive surface mining efforts.

Priority should be given to stabilizing sensitive habitats both terrestrial and aquatic. The monumented soil loss, a function of past industrial practices, must be curtailed.

Re: Page VII-9: The overall environmental impact of surface mining and minerals exproation work is said to be "more adverse at the low level that either the moderate or high levels because the smaller management capability would be available at the low level." This just does not make good sense. The Forest Service has certain responsibilities and authorities in regulation of the mining activity, pre-mining exploration, and rehabilitation reclamation. What you are saying here is that your organizational structure and administrative function in this area would work more effectively were there a relatively large scale (high supply alternative) mineral extraction effort on the National Forests. I would ask: Does not your organizational approach and administrative in this area need an overhaul?

P. IX-2: If we are to give more consideration for providing opportunity and access for mining then we should also identify this as an area needing greater emphasis.

Surface Mining, Pg. III-13. "Where leases are issued, land management agencies can prescribe conditions of use and require rehabilitation of disturbed land." Why have not these agencies enforced the use conditions and required rehabilitation beyond those currently in the limelight?

We strongly oppose the obliteration of any roads that can be used to spread the use of forest lands for recreation and future timber management harvest.

In our opinion, sediment yield under any alternative needs to be reduced, in some places greatly. Road building that would cause sedimentation where native trout or anadromous fish spawn should not be permitted; the fishery resource is valuable in this area.

Almost as important as an expanded research program is the completion of all the Forest Service land use plans before the results of the EPFF are put into effect.

I think that every possible effort should be made to restore disturbed areas made by strip mining because we need more grazing land for cattle.

One approach would be to strengthen the Forest Service's traditional functional planning apparatus (timber, recreation, transportation, etc.) so as to show the degree to which these programs may compete for the same types of land or be compatible in that they share resources or facilities. The critical question of how local unit plans are to be "added up" to form a national plan should have been addressed and layed open for discussion.

Land-Use Planning: Land-Use Planning is needed to prevent future mistakes. Also urgent in southeast Alaska is a program to correct the "major irreversible mistakes in the management of our forest environments" that have already been made.

Current practices and programs are doing the very opposite of protecting and improving the quality of air, water, soil and natural beauty as described in "Framework for the Future." As an example we have the promotion of pulp and cant mills without regard for air quality degradation. We have water pollution from the above industries in addition to continued logging to stream banks and shorelines. Logging on steep and unstable soils continues. Landscapes management is not succeeding in mitigating the scenic destruction resulting from clearcutting. It has been difficult to find Forest Service personnel who will even admit to the existence of the "Action Plan" let alone follow the recommendations outlined. Resource conflicts occur at every level.

Against the ease of obtaining claims (mineral) on U.S. Government lands, and thereby erecting "squatters" shacks and other unaesthetic structures, for in many cases these simply serve as free rides, i.e., little or no benefit in increasing mineral supply.

I favor solutions to problems which do not include dam building.

I agree that "A national land-use planning policy is needed."

Land Use Planning: Nothing is said about cooperative efforts with other federal agencies, State agencies, counties, cities, and private interest groups. Why?

All work possible should be done to preserve our basic resources of soil and water. Very important that soil be saved and not eroded. Needed to maintain long-term stability of the resources.

In the Land and Water System one of the activities listed is to "promote more effective use of forests for municipal water supply," etc. I think this is an area in which we must tread lightly.

Further complicating this (mineral, reclamation problems) is the fact that subsurface ownership of minerals is usually separated from the surface ownership. In order to reclaim both the private tracts and those on which the U.S. only owns the surface, they would have to be owned in fee by the U.S. Negotiations to accomplish this would be extremely complex. The proposed high supply alternative of 500 acres of restoration per year if all of it were applied to the Wayne National Forest would take 18 years to complete. This may be an unacceptably low level of activity and may not redeem agency responsibility for sound watershed management. In addition, consideration of pending Federal strip mine legislation should be viewed as a major opportunity for the agency to expand its

land base and further redeem its responsibilities. There are literally tens of thousands of acres of unreclaimed strip mined lands in close proximity to several of the Appalachian National Forests. It would seem natural to include these lands into the National Forest System and return them to a more productive state.

The Land and Water System provides a fine example of a biased indicator. There is an indicator of "soil saved from erosion annually by land treatment and watershed practices (millions of tons)." There is, however, no indicator of "soil lost from erosion resulting from forest activities (Millions of tons)."

The soil resource must be maintained and water quality must be preserved and enhanced wherever reasonably possible.

RESOURCE - Timber Resource System

In terms of timber management on National Forests, I strongly feel that efforts should be concentrated on high yield lands and not spread throughout the National Forest System.

I would like to see, under one or more of the research categories, mention of the need to find ways to harvest timber from old-growth forests without "liquidating" them or much reducing their usefulness as scenery and wildlife habitat.

Since many Federal highways are located on or adjacent to National Forests, one should use the term "traveler" rather than "recreationist." The ordinary traveling citizen on a major highway has a special right to expect that there will be no deliberate attempt to disfigure National Forest scenery for any purpose.

It would make sense to leave the management alternatives open, by choosing the highest figure for the national annual allowable cut. Obviously, recent history indicates that whatever figure is chosen, in reality, it probably will not be reached.

Low timber alternate. Will it not be possible to increase productivity enough through better management and knowledge to gain some output in next decade--not stay constant or lose.

In my area of expertise, the figure of annual allowable cut has not been reached. The practice of including salvage costs, dead wood utilization, etc., reduces the actual amount of live wood sales. This in turn, reduces the already unreached figure states in each National Forest's allowable cut.

The only rational way to harvest timber is on a sustained yield basis, not by force of public opinion. Do not exceed or we will rob future generations.

A major need is the revision of the method of calculation of the allowable cut from the National Forests to make the resource better able to provide for the Nation's needs and still meet the environmental objectives. This may require policy changes, but should be so stated as an alternative in the high program level.

Thus, it is respondent's view that as an aid to the national economy, Alaska timber production must be increased. To be increased, virgin stands in appropriate areas must be harvested to allow room for more productive second growth stands.

The Alaska Forests are principally old growth and dying, with 46 percent defect; sufficiently important to warrant prompt attention.

At present, timber culture is too high, well beyond real sustaining yield on long range basis.

Higher timber yields would do harm to the soil and water resources, such that they could not support even the present rate of cutting on a sustained yield basis at some point in the not-too-far-distant future.

National Forests, at least in the Northern Rockies, are not capable of withstanding additional increases in timber production, nor road developments if the Forest Service intends multiple use management. The development of these areas will only be done with high environmental costs.

Large trees should be cut, where necessary, a few years before reaching climax proportions, but not in a clearcut. Using the National Forests as a tree farm should not be a long term trend.

Designate timber harvest areas where timber has already been cut for accelerated timber agriculture and management.

However, I question whether the EPFF has a sufficiently strong forest management program to carry the Forest Service to the high position that it should occupy in this country. Therefore, I strongly urge that you strengthen the forest management sections of EPFF until it is every last seedling and every last ton of wood fiber that the Congress will approve and finance.

National Forests should not be simply regarded as an extension of the Nation's agricultural lands for growing timber.

The second comment concerns timber management programs. Timber is a weed, if you will, on much of the Southwest, Colorado, Wyoming, Utah, Nevada, and portions of California, Idaho, and Montana, yet the Forest Service is increasing timber growing programs on these areas. Most of the programs have developed from research in California, the South, and the Northwest where conditions for timber growing are optimum. I worked in Timber Management in Region 3 from 1933 through 1952 and I made it a point to reexamine areas subject to earlier treatments and to keep abreast of research at Fort Valley and its satellite areas. The only areas in the Southwest which can be considered as good timber sites are on the Colorado Plateau within the Kaibab, Coconino, Sitgreaves-Apache National Forests, the Sacramento Division of the Lincoln and small portions of the Jemez and Tres Piedras Divisions of the Santa Fe and Carson. None of these compare favorably with the better sites in California, the Northwest, northern Idaho, and western Montana, and they are far inferior to capabilities in the South, yet the same type and degree of intensity of management are being attempted.

We should not be harvesting more timber than is being replaced. If demand is greater than regeneration, then demand should not be met.

Don't think National Forest lands in the Rocky Mountain area are as productive as they are cracked up to be. Intensive forestry for timber production is not justified on about two-thirds of these rock piles.

Better timber management should come first. Then, if there is an actual increase in timber volume growth, then and only then should cutting be increased.

Adequate steps must be taken to ensure we are renewing faster than we use.

At the same time, we feel that the time is at hand to reexamine such National Forest management policies as "evenflow," "non-declining yield." There are sufficient reasons for questioning such policies as being both economically and silviculturally unsound--and that they may be inhibiting proper management, unduly limiting and restraining optimal use of our forest lands for all the benefits of the people of the Nation.

Reduce sale offerings and road construction in steep (50 percent plus) topography. Allow technology to catch up in wood utilization throughout the National Forests prior to entering hard-to-get-to areas.

X The increase offered for sale must come from unregulated provided by increased access and different logging systems. Current regulated allowable cut is exceeded in many areas. The crunch from private timber "cutout" is here in many areas, resulting in abnormal high levels (of harvest). Forest Service cannot solve everyone's problems. Current environmental constraints will also affect volume to be offered. I think our estimates are high. We really need to increase emphasis on nursery stock developments and capacity. Need to develop a better method to reforest harvested site IV and V with a species that will grow and produce within our other constraints as soon as possible. Also need to provide the incentive to do the same on private land.

Remove class IV, V, and VI timber lands from allowed cut. The loss in unstable soils and upset water flow patterns cause more loss than the gain realized by harvest.

The current timber sales harvest is much too high on National Forest lands in the West, so your "low alternative" is much too excessive in allowable harvest.

The Forest Service must intensively manage lands that are generally higher timber producing sites, lower scenic quality, and flatter lands. Other areas that the Forest Service is now harvesting on--areas over 30 or 40 percent slopes, highly scenic areas, or areas right next to wilderness areas--should be left alone.

Intensify timber harvest to stop the waste of billions of board feet that are wasted yearly by not harvesting.

Much area managed primarily for timber can be used for dispersed recreation between cuttings.

Gross changes in type (hardwood-conifer) (Page VII-59) should be avoided, unless compelling reasons for such change exist, and environmental impacts will not be severe.

Timber harvest and recreation uses can be made more compatible than at present.

All three alternatives here will wreck the National Forests, and cost the taxpayer enormous sums in the long run. Wise up and let's have more gentle management of the National Forests. Slow down on environmental degradation by refraining from intense timber management.

Give exclusive emphasis to most productive National Forest lands and small private holdings. Lands of greater than 25 percent slope should not be considered for investment. Don't support more roads except on productive land.

Production of wood on commercial forest land should not be impacted for short-term aesthetic or recreation reasons. These items must be subject to the production discipline. Plan indicates wood needs subservient to them. To a large degree, high forest production with 60-100 year rotations are compatible with other uses.

The EPFF indicates plans to modify or adjust the timber management programs to the needs of the other resource areas, water, recreation, range, etc. If modified to the extent possible to accommodate maximum economical wood fiber production. The majority of Americans will demand that our largest and most versatile resource be given primary consideration when the facts are known.

- X The other alternatives don't indicate what additional cost and manpower would be needed for implementation. Neither is there any indication what additional revenue would be generated. If the low alternative represents the FY 1975 program, the additional dollar and manpower needs for the moderate and high could be expressed as percentage increases. Management plans should be followed.
- X X Failure to properly manage forests will mean that nature will manage them for us adversely. Timber management is compatible with all other multiple uses, except wilderness.
- X X In each of the three alternatives for "Timber Resource System" the proposed harvest is expressed in number of board feet, but the reforestation and other treatment is in number of acres. It would be of interest to many to know the relationship between the two--from how many acres will the 13.4 billion board feet be removed?
- X X A much stronger emphasis is needed for more complete utilization, especially in dead wood and small size such as thinnings or small top diameter.

Get roadless area studies done and a decision made as to their final status

Step up badly needed salvage of old growth forests and insect damaged stands. Too much timber now being wasted due to the lack of intensive action towards removal.

X The listed objectives should include intensive soil examination and classification and accelerable aerial photography for resource management planning. With the accelerated use of National Forests in the past few years, a 5-year maximum between flights is all we can afford for quality work.

X The rate of management must be accelerated if we're going to reap the benefits of our investment within a reasonable time frame.

Excessive old-growth timber stagnating, plus oversupply of overstocked stands, necessitate accelerated programs of precommercial thinning and old growth harvesting. Such a program would stimulate the economy and enhance forest land values as well.

The Forest Service cannot disregard old growth management policy reform if a rational and effective program for meeting the Nation's timber requirements is to be developed.

A major policy alternative is that recommended by the President's Advisory Panel on Timber and the Environment to increase cutting rates for old growth timber on the western National Forests. This issue is described under the heading "Timber Supply" in Chapter III. This discussion should be developed into a decision.

In the area of timber utilization, we urge more intensive management and utilization. We think a 29-billion-board-foot increase over a ten-year period is too low. The doubling of commercial timber growth in 25 years is again too low.

In resources assessment, we ask that the high alternatives under reducing the inventory cycle for timber resources include the Nation, not just the South.

Given the predicted levels of demand, the significant economic benefits of intensive management and the demonstrated compatibility between systems, the selection of any other option would be obviously incongruent. This does not imply abrogation of multiple use in favor of a timber-dominated management direction on the National Forests.

We favor increasing timber supply by (1) more intensive timber management and utilizations; and (2) extending existing supplies through recycling of wood fiber, reduction of losses from pests, and through improved processing and products design that reduce amount of wood used and wasted.

XY Some of the increased yield should be tied to additional appropriated funds. There are large areas of immature forests in which commercial and precommercial thinning and other cultural operations are needed; and, I am afraid, are included in current estimates of yield, but cannot be carried out until transportation system is developed. These areas should not be included in allowable cut until they do in fact become available for harvest and cultural treatment. We are currently overcutting the standard portions of our forests based on yield estimates made as if these undeveloped areas are under management.

- X Y Inventories should be carried out on all forest land. Talk about eliminating up to 4,000 miles of road in C&W Resource System and propose 8,000 miles here. Appears to be a conflict.

- X X I personally believe the alternatives here are poorly developed. There is too much combination of big jobs, silviculture, timber harvest, road construction, reforestation, etc. An increase in supply in one warrants an increase in another area.

- X X High supply financing is needed for low supply production to prevent further damage to other resource systems. Considerable emphasis should be placed on planning for future developments so that any increase in funding can be used effectively.

- X X Until we know the requirements of associated wildlife species, until we can build roads that do not pollute streams, we should not accelerate harvest.

- X X To up the cut today, on the hope of greater future production strikes me as exploitation of a resource for the benefit of the present and to the possible (and even probable) detriment of future generations. We must recognize that there are millions of acres of economically marginal forest lands in the western National Forests now classified as commercial that probably should not be cut at all, or, if cut, cut lightly with protection of other values, not just timber production foremost.

- X X The rate at which old growth is cut should be determined by the growth rate of the second growth to follow and the number of rotations chosen over which the forest is to be brought into balance.

- X X There will be real crunch when the old growth is gone and the second growth is still some years away from fulfilling the needs and desires of the public. This is especially true in SW Oregon where site quality is poor. However, we are making some progress. Let's hope its in time.

- X X The entire forest investment program should be redesigned to provide adequate capital during initial development to distribute harvesting activity over the greatest possible area at any one time.

- X X How will an increase in annual cut now affect the annual cut 20, 30, 40, and 50 years from now in terms of quantity, quality, and size of material? The figures indicate only a 6 percent increase in revenues for a 40 percent increase in volume sold. Timberland that is so marginal for commercial production is generally best left alone.

- X X Favor "high" only with intensification of management.

- X Y After the inventory data is acquired, plans to develop the timber resource could be developed rapidly. How can we increase our harvest or develop management plans with any real substance when we apparently know that we need silvicultural examinations on 25 MM acres and need inventories on 62 National Forests.

Your program for the future is to mass produce very small trees, mainly for pulp, chipboard and glued stock. The energy used in fabricating small trees is proportionately much higher than that required to fabricate wood from large trees, the optimum being from trees which will produce logs averaging about 26" to 30" at the small end.

On page VII-59, you propose to double the acreage subjected to even age management between 1970 and 1984 according to Table VII-8. Yet you pretend that clearcutting would drop during that period. This is a deception.

Your real objective is described again on page VII-4. To intensify management of the most productive timber producing land both public and private. I agree that such practices may be perfectly appropriate on certain of our private forests, but they are not the sort of thing that we should do on the National Forests. We insist that the better quality commercial forest lands on the National Forests should be managed for integrated multiple use. That consists of using a selection system of management (not to be confused with all-age silviculture), long rotations, sustained yield of high quality material, and extreme care with respect to the land.

X X The preferable alternative to the current situation would be to practice varying TM intensities based on the capability of the land to produce fiber. The overall result would seem to be greater efficiency, greater timber production, and less environmental impact. And best of all for taxpayers, I believe it could occur within a budget similar to the moderate alternative.

X X In a similar light, the total spectrum of opportunities for increased timber production should be explored--inside and outside of the National Forest System. Most of the lands with the highest timber growing capabilities are in private hands. Despite industry propaganda, there are millions of acres of good site lands growing nothing but big brush (the evidence can be found in the "outlook for timber" statistics as well as on the ground observation). Apparently much of the industry has decided to let the public make the large management investments for themselves (Weyerhaeuser is a shining exception).

X X There also appear to be more opportunities to increase output by geographic redistribution of input; concentrate on the most productive sites and areas.

X X The high supply alternative is not attainable nor consistent with other objectives of National Forest management. It cannot be produced within the framework of good environmental management. This proposed program does not consider land management objectives for planning units on the National Forests nor does it consider land capabilities and limitations on these units.

If 12 million acres represents 13 percent of the commercial forest land, the total C.F.L. is 93 million acres, the entire amount reported in the inventory of forest resources of the National Forests. If you "convert" 12 million acres to even-age management in 5 years, the whole 93 million acres will be converted in 77 years. Therefore, the only question you really ask us to comment on is the rotation. In effect you are asking us whether we want:

LOW: The entire 93-million acres of commercial forest land clear cut and managed as even-age stands on a 77-year rotation.

MEDIUM: The entire 93 million acres of commercial forest land clear cut and managed as even-age stands on a 67-year rotation.

HIGH: The entire 93 million acres of commercial forest land clear cut and managed as even-age stands on a 47-year rotation. This would be purely a pulp operation providing studs and decking from cores of the larger logs.

Provide as much timber resource for industry as is needed, but without depleting the renewable resource for future generations.

X X It seems that the best way to long-range plan the timber resource is down the middle of the road. Politics, economic conditions, and environmentalist group pressure seem to exert an influence on what the Forest Service production goals are in this resource. Sometimes I think we give people the impression that our planning changes with whatever way the wind happens to be blowing. Many of the items listed in the alternatives are tied to the emphasis given to production goals. Timber is a tremendously important resource but maybe it has been emphasized at the expense (and financing) of some of the other equally important systems.

We vigorously opposed the systematic and accelerated liquidation of old growth stands of timber because it is the retention in the forests of a large inventory of well dispersed healthy growing trees beyond rotation age that provide the multiple use values and which are essential to multiple use management.

When a productive, ecologically stable forest is harvested and an even-aged stand from the same seed source is substituted, the Forest may be less likely to reach maturity than if the stand were left in selective cutting. If large areas are committed to experimentation in this manner, the risk to future generations may be considerable. Forest Service plans to convert large areas to potentially high yield stands should include analysis of the increased probability and consequence of crop failure. One measure of the consequence might be the cost of reconverting a Forest to the earlier stable production ecosystem.

The EPFF then recommends intensified forestry on the most productive lands, increased utilization of those parts of the tree not now used and an increase in imports. The "trade off" is that "some of the environmentally sensitive land could be retired from timber production." Hence, more land could be devoted to non-commodity purposes.

The assumption is made by industry that they can take all the timber quickly and a little wear and tear doesn't matter. Unfortunately such actions leave two basic problems. Someone has to repair the damage and someone has to figure out an artificial way to get new production again quicker than nature will provide. The answer is usually a "technological fix." In the case at hand, the technological fixes are called "intensive" forestry.

Unfortunately, "intensive forestry" is expensive. Because of the uncertainty of long-term economic trends, it is also risky. For example, the long term cost of fertilizers or of labor may or may not make it uneconomical.

In addition, "intensive forestry" is biologically risky. It is not certain how the system of genetically "improved" hybrids will fare in the face of the unexpected. For example, a new disease could blight the crop. It may be impossible to come up with a technological fix. Furthermore, even if the "fix" is available, society may be distracted by some of its periodic troubles and not apply it.

At the present, the Forest Service is practicing "extensive" forestry. It is pushing its road system into every nook and cranny of the forests in order to harvest all the commercial timber.

Am opposed to an increase in cutting on the National Forests until the Forest Service and the industry can get more efficiency and more yield out of the present level of cutting.

- X X Increased productivity through technology sounds great, but don't forget the law of diminishing returns. Will you really be able to encourage faster growing forests to justify more cutting?
- X X A crash program is needed to get timberlands growing timber and producing to their optimum.
- X X Continue to provide timber, but we should develop land use plans and better inventory data before we go to a high alternative. Especially concerned about sale offerings and road construction. We need additional examination work, inventories, and reforestation.
- X X We need to bring all facets of timber up to the levels of cut. This is extremely important in the areas of inventories and silvicultural examinations.

X X I have several reservations. I cannot agree with increasing the sell until it can be shown through the inventory and TM plan process in coordination with the multiple-use planning process that the increase is feasible and realistic. We need to increase our examination and inventory program. On the local scene, more roads and increased money for salvage sales are sorely needed. Much of the increased funding for timber is needed more in other systems. I would hate to see increases here if other systems are not adequately funded.

The Forest Service should lead the way in improved timber management. Since timber, if managed properly, is a renewable resource, this should be done.

The comments about intensifying timber harvest and cultivation in good silviculture areas on VIII-4, are to be highly praised.

One wonders how the increased cut can become a possibility on a continuing program. In 1973 the National Academy of Sciences and the National Academy of Engineering made a report for the NATIONAL COMMISSION ON MATERIALS POLICY. In the section on the forest products we read on page 134:

For all species, removals have exceeded growth by a small margin; among softwoods the excess of sawtimber removals over growth has been of the order of 20 percent in recent years.

Commercial forest land needs to be classified on something more than the number of board feet per acre. The soil must have the capacity to grow successive crops and to respond to silvicultural methods.

The Forest Service should concentrate its forestry efforts in those areas and with those genotypes that mature most quickly and offer the greatest annual yields.

Old growth stands are very much a part of this Nation's heritage, and should not have a price tag placed upon them.

The alternatives presented with regard to timber, however, are not the choices available to the Forest Service. They are rather a range of alternatives the Forest Service offers us, all beyond the law and requiring new legislation.

The number of board feet of timber sold on the National Forests cannot be considered a very good indicator of the results of the "Timber Resources System." It ignores too many other factors such as the type of land from which the timber is sold, what the rotation period will be, and the value of the other resources being sacrificed.

We believe timber production has been overemphasized in the Southern Rocky Mountains. We believe that there is far less commercial timber type (20-50 cubic feet per acre per year) than indicated. We also believe that tree planting for future timber production is not economical. We also believe that timber invasion into once natural openings is not in the best interests of watershed and wildlife management.

You should only build roads and harvest timber as rapidly as you reforest and develop potential timber harvest area so that a continuous and balanced cycle is maintained. There could be no excuse for depletion of timber resources.

We could agree with increased timber sales and road construction only if an equal amount of forest land is reforested and put back into equal production.

Low option: With the onset of much better harvesting techniques and stabilization of the U.S. population, it seems the domestic demand will not increase that greatly in the next decade.

Some portion of each watershed ecosystem should be left in as nearly a natural condition as possible as a "control" for those areas which have been logged and replanted.

The proposal for "intensive" forestry is in truth not a "trade off" at all. Actually, the "intensive" proposals are the justification for the acceleration of the "extensive" program. By persuading itself that production from the "intensive" program will provide copious supplies of timber in the future, the Service reasons that it is therefore all right to liquidate the old growth as quickly as possible. This is not a "trade off."

In all likelihood, the results of intensive programs will be disappointing. The favorable social, economic and environmental factors which must coincide to produce the predicted results are too many. The boom bust cycles of natural resource exploitation is very common, yet the lesson is never learned. The Forest Service should wake up and realize that the Forests aren't going to produce more and more, forever and ever. They should practice a solid conservative forestry which insures the long continuance of the high quality Forests of the past.

If the general public could be made aware of what you are doing (actually accomplishing!) - and aiming toward - in both controversial clearcutting and range regeneration--these two areas would be placed back in the hands of the specialists where they belong. It does not make any more sense for the layman to tell a silviculturist how to manage a forest (much less prohibit clearcutting!) than it would to see seek the services of an expert surgeon and tell him how to take out your appendix. With such publicity you could master all the grass root support needed. It is sad that affirmative actions seldom surface and that only negatives seem to be stressed. Something should be done about it.

III. As a matter of policy, investment of public funds in assuring adequate future timber supplies will always seek the highest possible rate of return in terms of future timber inventory. Priority in such investments will therefore go to those forest lands which are classed as potentially most productive and thus will yield the greatest increase in timber inventory for the invested dollar. These are defined as those lands capable of yielding 120 or more cubic feet per acre per year.

The description of the Forest Service's programs and research to increase the utilization of timber should be accompanied by estimates of how much timber will be saved through such programs.

Before projecting timber production goals, the EPFF should examine the actual productive capability of the National Forest System and other potential sources of timber. It should explain how the annual allowable harvest for the National Forests is calculated.

Increased funding for more intensive management of specifically the high-yield sector of National Forest lands, i.e., those lands capable of yielding 120 or more cubic feet of wood per acre per year.

The EPFF should address allegations that there is widespread overcutting on the National Forests, particularly in the Rocky Mountain area, in spite of "allowable harvest" limitations.

The EPFF should explain how the projected timber sales volumes for the next 10 years under the 3 proposed options can be harvested without violating sustained yield.

The best idea in the entire EPFF is found in the summary, on page VIII-4: The words in parentheses are ours. "The cost of capital is steadily rising, making it one of the scarcest resources; it must be allocated wisely. The potential for concentrating investments that bring the greatest return (in future timber supplies). By investing more heavily on the most productive sites, some of the environmentally sensitive land could be retired from timber production." Unfortunately, this very sound policy, to which we subscribe, is nowhere found embodied in any of the presented program alternatives.

The EPFF, on page VIII-4, wisely suggests "intensifying management of the most productive timber-growing land, both public and private," and on page III-10, "this might include subsidizing management of the many small privately-owned woodlands that represent most of the Nation's productive timber-growing potential." Unfortunately, however, this concept of subsidizing non-industrial private forest management never found its way into any of the presented alternatives.

HIGH: The entire 93 million acres of commercial forest land clear cut and managed as even-age stand on a 47-year rotation. This would be purely a pulp operation providing studs and decking from cores of the large logs.

Timber on the National Forests is now being cut at rates far in excess of those quantities which can be cut annually in perpetuity (i.e., sustained yield). We have found this to be the case wherever a detailed study of a timber management plan has been made. This was our finding on the Bitterroot National Forest in Montana, the Six Rivers in Northern California, and the Tongass and Chugach in Alaska.

Essentially, the EPFF asserts that the "High" alternative will have less effect on esthetics than the other alternatives. This appears to be based on a table on page VII-55 which shows a higher percentage of "seed trees and shelterwood" cuts on the high alternatives. However, even under the "High" alternative clearcuts will affect the same number of gross acres as now. The percentage in the other categories will grow only because they are greatly increased in total. On top of that the seed tree and shelterwood cuts are not much of an improvement over bald clearcuts. They range from cuts which are in effect clearcuts with a few trees left to reseed, to a cut which leaves a general moth eaten appearance. Last of all, they all result ultimately in the esthetically dull even-aged forest.

Because of the considerable body of expert testimony pointing to Forest Service failure to maintain sustained yield, the Plan should address itself to this question in detail. The present draft hardly acknowledges that any question of sustained yield exists.

It is not true that "The rate at which this old growth (lumber in the West) should be converted to more productive second growth is the question." In many instances the question is not the rate at which old growth is to be converted but whether it should be converted at all.

III-II, 3d paragraph, 1st sentence. This says harvest of old growth timber as quickly as possible would be "most efficient." This is misleading and, as flatly stated, is erroneous. You should explain. For example, most "efficient" for what? Also, to make this a balanced discussion, you should explain the disadvantages of quick cutting of old-growth on all of the multiple uses of the forest, including timber!

We strongly urge the National Forests to carry relatively heavy growing stocks to relatively long rotations and to continue your policy of non-declining flow under sustained yield!

The proposed program defies the principle of multiple use and if the Multiple Use Act of 1960 were ever properly interpreted the proposed program at any of the three levels would probably be judged illegal.

On page 111-10 and 11, the location of timber industry is discussed and an assumption is made that timber production dollars should be spent on marginal sites to prevent hardship on some rural communities. This is not sound economically or ecologically.

Page VII-30, "Essentially, productivity is being curtailed because of current demand for minimizing disturbance of forest landscapes." This opinion may prevail within the Forest Service, but I'm sure it would not within the leadership of the citizen groups who are attempting to establish values for resources other than those you can load on a truck and deliver to the market.

Grow trees by natural method not farm-like rows but with natural varieties on every acre.

Harvest rate should not be allowed to reach a level of 18 billion bd. ft. by 1984. Control of harvest is essential to control of community growth.

We feel the inventory level at the high alternative should be carried out, regardless of the level of activity chosen in this program.

Do not think it is wise or fair to the public to "convert" remaining old growth to "young, vigorous forests." Conversion is an irreversible decision. My objections to accelerated old-growth cutting are not just esthetic. Mainly they're logical, against what I regard as a sell-out to private interests, and an interest of mine learning how a forest works ecologically, an old-growth forest.

An appropriate mixture of forest conditions is most beneficial for wildlife, and it should not be in 40 or 50-acre chunks. This does not agree with the publicity put out by the Eastern National Forests, or with their practices.

A very strong case can and should be made for a major increase in long-term investments in forestry and related natural resource management. This would be part of a longer view of the critical choices facing our country.

Congressional emphasis on timber cutting rather than timber management (culture, reforestation, type conversion, brush rehabilitation, etc., as well as harvesting), as well as budget restrictions have brought the level of "management" on the National Forest lands to the threshold of non-management. This is indeed a sad state of affairs.

This brings up the point that nowhere in the program justification is there a statement of the advantages of intelligently managed vs. unmanaged forests. In this section of the country these would include retention in the stands of some of our most desirable species such as yellow birch, black cherry, white ash, and white pine; tremendously improved wildlife habitat conditions; increased water yields of at least 7,000 gallons per acre per year for the entire area; better recreational opportunities for more people and, above all, maintenance and/or improvement of the economy (The Adirondacks, as you undoubtedly know, have become a rural ghetto). These are the sorts of things that should be emphasized in environmental impact statements for proposed wilderness areas in our Region also, particularly those including better sites such as Wild River in New Hampshire.

It is unfortunate that you had to start your estimated returns from the timber harvesting programs with the artificially high stumpage prices prevailing in 1973. This results in less of an increase in anticipated receipts for the high alternative program than would have been the case if 1975 figures, or even final 1974 figures had been available.

The request to designate with a low, moderate, or high level of Forest Service activity in the various Resource Systems of study, seems to me to be defeating your very purpose. As stewards of the land and forests of the public, the only criteria of program should be the maximum benefits of all the resources at any one time in esthetic and amenity values along with adequate offerings of goods and services. Anything less is lack of good management or, maybe even, mismanagement.

Irrespective of demand for forest products, the Forest Service must log at no greater than sustained yield rates.

I thought the statements on the issues of even age management and old growth timber management are among the best I have seen from the standpoint of clarity and balance.

X X I'm tired of seeing sloppy extensive management, disregarded for other values, unnecessary and poorly built roads, etc., in the name of timber management. Increasing the required cut is not management.

The very poor quality of lumber from present second growth timber needs to be faced.

Overcutting in some drainages is already damaging other resource values.

Under this system I would recommend that all current and future timber resource management programs be held at their existing levels and not increased.

Believe that timber production should be increased, but not at the expense of the environment. If the timber harvesting operation is done properly damage will not occur.

The "showcase" harvest methods used along highways and recreation areas are just that--showcases. When you get out of the travel influence zone its a shambles.

The low option is most consistent with our philosophy of maintaining an optimum amount of wilderness. We are strongly opposed to the sale of timber from areas such as Afognak Island off the coast of Alaska.

The EPFF should describe the requirements being written into timber sales contracts to achieve this goal. It should describe the program of technical assistance to sawmills to increase the efficiency of processing activities, indicating what success the program has had and how its effectiveness can be improved.

The EPFF should describe how the cost of a timber sale is determined and how the minimum acceptable bid is calculated to assure that a fair return is received on the taxpayers' investment.

(VII-13, 3d paragraph) We are disturbed by the statement that sale administration would be better under the high alternative. In our opinion, the standard of sale administration on the National Forests should be high. The standard should be high whether you sell a little, a moderate amount, or a large amount.

Provide either incentives or penalties in order to gain better utilization of present waste in timberlands.

Conventional logging methods must be modified--economic problem.

Need to improve utilization (in woods and some mills) without constructing as many roads which contribute to soil erosion, destruction of wildlife habitat, esthetics, etc.

VII-17--Dragging logs across streams may be done in places, but rarely on National Forest lands.

We are less concerned about how much timber is cut than we are with where it is cut and how the cuts are planned, timber regeneration is accomplished and so on.

In many logging operations a large amount of wood is left rotting on the forest floor.

Good timber management should include attempts during harvest of specific stands to avoid destruction of trails providing access to points beyond.

Another aspect of the timber system which should be properly addressed is the significant difference between the allowable harvest (1984) and estimated sales offerings at all three program levels. The reasons for the existence of this situation should be described and various alternatives for providing sale offerings at a level more in line with allowable harvest should be adequately discussed.

In the timber resource systems area, Farm Bureau believes growth goals should be established to increase substantially the timber yields from forest lands to combat inflation as well as provide the wood products for increased housing requirements of the nation.

Is any of the projected increase in timber sales in, say, the "high" alternative dependent on the productivity of research efforts? If so, what happens if the research makes a good effort, but fails to come up with results?

The indicated 1984 annual allowable harvest of 20 billion board feet under the "high supply alternative" is less than the annual allowable harvest of 22½ billion board feet which, one year ago, the Forest Service projected could be brought about by proper funding within a decade (Timber Industries, September 1974).

- X X I hope the Forest Service is not promising increased levels of allowable harvest and timber sales offerings that cannot be supported on a sustained yield basis.
- X X With better market conditions for low quality timber we should be able to operate in more marginal stands and get better utilization in the ones we do operate in. I don't see much chance for increasing high quality sawtimber, more likely a decrease in this product.
- X X Since timber harvest and related activities result in large accumulations of slash, all 3 levels should incorporate the action needed to properly treat or dispose of such slash. This fire management consideration should be an integral part of the timber system.
- X X The Forest Service should seriously consider "in house" logging to avoid sloppy, destructive logging practices that occur when loggers cut corners and leave the residual stand ruined in order to make a quick buck. Slash disposal and replanting on harvested areas within one year of the harvest should become standard procedure.
- X X Higher level of timber supply may well consider that most would involve no road systems of logging selectively, but past experience is that the economy of helicopters and skyline logging systems is shakey and managers are buckeling under and not able to sell sales for selective logging using these systems. It always ends up clear cut to make an economic sale.

The present practice of Forest road construction, both main and spur, as required in various timber sale specifications appear to be a monumental rip-off of local counties, recreationists, preservationists, and the timber industry. Due to the specifications demanded in road work under the present 2400-6 Sales Contract, there exists little or no cash flow to the Forest Service from the purchaser, thereby causing the cessation of revenue to local county treasuries. Moreover, the specifications amount to highway construction, that appear to be unnecessary in most instances. Such road work is not desired by timber sale purchasers, for financial reasons, and justifiably opposed by preservationists due to aesthetic impact of vast cut and fills.

It is my belief that such road requirements exist due to an extremely efficient vested interest lobby: the Engineering Division of the U.S. Forest Service. I believe that Forest road design, in regard to timber sales, could be planned in a way more acceptable by a "generalist" in the field of Resource Management rather than by civil engineers whose expertise do not include ecology or resource management.

If the high supply is chosen for both this item and the land and water system, the net effect is more roads. While there is mention of two types of roads in this item, only one type of road is indicated in the Land and Water system.

The section on soils impacts from road building (pp. VII-14, 15) is very deceptive. We are only told that "erosion, landslides and slumping hazards would increase" under the "moderate" and "high" alternatives.

Although the harvest at the higher level is desirable, the considerable increase in road construction using the presently applied techniques is not desirable.

Instead of closing current roads and extensively building new logging roads as the EPFF provides under all of the alternatives, it would be more in line with multiple-use management to intensively manage for timber areas already roaded and developed, leaving unroaded areas for wildlife, watershed and aesthetics.

Am against--any great increase in road construction.

Reduce new road construction to a minimum and prohibit road construction on slopes greater than 30 degree or which are subject to erosion.

Wonder about the "obliterating roads" from Land/Water System and constructing new roads in Timber Resource System.

Build no more roads than absolutely needed--use helicopter and balloon logging, etc., wherever possible.

Road construction for access to wilderness (or other areas) must not intrude upon wilderness qualities, nor, for wilderness, make access too easy.

Current road standards are excessive. I continually see 30-feet wide roadways throughout steep country when a narrow winding road would have served the purpose without destroying much of our resource.

There is too much slippage in timber-built roads (lack of engineering administration).

The road building that is associated with timber cutting is not acceptable.

The building of multi-purpose access roads into back country and roadless areas should be by using general fund monies. It appears that too large a percentage of roads are built with timber receipts.

We are building roads that are not needed just to remove the timber resource. In the past, there has been entirely too little objective study in placing money into thinning and other reforestation projects. I feel that spending money for stand improvement work by thinning in low-site areas is a misuse of public expenditures.

Though Black Hills National Forests need more cutting, we are constructing far too many roads and most of them are built to excessive standards.

Overlooked is the fact that much more than 1/2 of the recreating public in National Forest lands takes advantage of access roads built and maintained through the sale of public timber. This segment of the recreational public can continue to expand as more roads are built or improved through increases in timber harvesting programs which, also, need the roads.

Forest Service should develop roads in advance of logging with appropriate funds to permit reduction of losses due to fire, insect, and wind damage.

There should be restrictions on logging roads in some fragile areas, different logging methods should become more widespread in use--cost is offset ecologically.

We suggest the possibility of using some of the timber access for off-road vehicles use.

X X Elements of both publics believe roads are often located so as to cause unnecessary damage (cuts and fills). Under present Department of Transportation regulations, standards for Forest roads do not differ from State highway standards. There appears to be no distinction drawn between a well-traveled highway and a seldom-traveled Forest road.

X X Seriously question purchaser road construction because many deficit timber sales result from inadequate specifications to protect the soil, water, and fish habitat. Very important issue!

X X If the miles of roads displayed in the high alternative is real, we question if this is consistent with the needed work in the land and water system. There is a need for greater emphasis on developing logging systems that need less roads.

Greatest potential source of additional wood fiber is private woodlands not National Forests. These two points are crucial and must be emphasized if timber values are to be kept from dominating and partially destroying other values in the National Forests. Timber harvest and recreation are often in conflict. The increased demand for lumber is applying incredible pressures on other forest values. One way out of this conflict is to focus on private land for timber values and manage those parts of the National Forest not yet open to timber development for recreation, wilderness, water and other values.

The closing of roads leading into Federal lands then later building new ones appears to be a highly inflationary act.

X X Avoid "overdeveloped" roads.

X X We should do an intensive TM job instead of present system. Someone needs to take an indepth look at purchaser roads being constructed under "need for timber access." Don't understand why there are more miles of purchaser road construction to administer under "moderate" than "high."

VII-14, Transportation Systems and Access, 2d paragraph. In our opinion you should not push roads into any area, whether under a low, medium, or high alternative, unless, after careful study, you are confident that adverse soil, water, and visual impacts can be kept to a very low level.

X X Do not agree with supplementing timber purchaser road construction. The usual result is of opening up an area to future treatment that is marginal at best. Let's invest our money in the best growing sites in the Nation and defer treatment on forests or States with low productivity. Many of the areas with low timber productive (sic) are more valuable for production of water, wildlife, recreation, and forage.

We were not given any quantitative information on any appraisal of the seriousness of the problem. Instead the problem is minimized with statements such as "Impacts of logging and road construction on soil movement and waterflows will be held to a minimum on the National Forests by careful attention to the design and layout of road systems." (P. VII-14)

X X Don't rely so heavily on purchaser built roads--construc our own with FR&T funds.

X X Finally, close and put to bed a few thousand miles of logging roads, especially those jammer roads.

X X I do not believe the public will object to intensive timber management so strenuously provided that we can significantly reduce the miles of access road construction and reconstruction.

Why, with the moderate option, is there more sale purchaser road construction than with the high option?

Roads built for removing timber should be of non-permanent nature.

In the timber resource system the proposal is to construct 48,750 miles of new roads. I estimate that the construction will take 195,000 acres out of timber production. I wonder if it is actually necessary to construct all of these roads.

The EPFF should discuss the need to coordinate management with other activities such as timber harvesting and roadbuilding.

The prize for the modt incredible statement goes to one found in Page VII-18 "The sediment yield under all three (timber) supply alternatives is expected to be kept near the current rate." We note that under the LOW alternative,

road construction and reconstruction would be 1200 miles; under the HIGH alternative the figure would be 8750 miles! All previous experience has shown that if road construction is increased 7-fold there is no way that the sediment yield can be held anywhere near current rates, no matter how carefully the work is done.

Increased attention must be given to replanting burned and/or cutover areas which are potentially productive--such efforts need to be closely coordinated with other resource considerations.

Supplies from federal land should be stabilized at near the present level. Any increase should come from more rapid and improved reforestation.

There is a current backlog of nearly 4.8 million acres. Only 100,000 to 150,000 acres are replanted each year, and of those a certain percentage fail to survive. I deplore the refusal of Congress and the President's Office of Management and Budget to provide funds for restocking these areas. Why has timber management received 98.9 percent of initially requested funding between 1963 and 1972 when reforestation was granted only 41.5 percent of their estimated needs through 1973?

What about possibilities of forest fertilization and site quality improvement?

On the matter of reforestation I believe that a 1:1 cost-benefit ratio could be a good point to accept as reasonable.

Stop monoculture planting of single species such as pine, and allow a natural balance of pine, hardwood, brush, etc.

It is difficult to determine if this alternative would catch up a backlog of reforestation and timber stand improvement. This backlog should be eliminated.

Forest Service managed lands must increase their contribution to our national and world needs. Conduct silvicultural treatments on the most productive land first leaving less productive ground for later examination.

Your recently suggested program of even-flow or continuous flow whereby current Forest Service timber inventories, composed heavily of over-mature 200-400 year old stands in the West, are programmed for removal at a near constant rate over the next 150 plus years, is a case in point. The loss through decay, windthrow, disease and other forest inventory degenerates will reduce the volume by at least 25/35 percent over that possible under an intensive forest management plan. This is wrong. Each National Forest is beholden to the public to examine their particular inventory by age classes and stand vitality and develop the necessary management programs that will minimize the timber loss. We cannot grow thrifty new trees on the National Forest lands until the standing decadent old growth is removed.

Plan Fiscal 1976 at this level and move toward "high alternative as follows: Silv. Exams, etc., increase rate of activity at an even annual rate to be at the high rate by Fiscal Year indicated below.

The current annual cut on the forests is in many places greater than sustained yield level, in large part because of backlogs in reforestation.

We have some reservations concerning the accelerated liquidation of old growth timber within the National Forest system. More study is needed to determine the long-term economic impact of this option.

Timber management and reforestation plans should emphasize a diversity of species wherever there is variability in site conditions. Monocultural practices increase the incidence of pests and disease, and greatly reduce wildlife carrying capacity.

X X There is also considerable weakness in the way timber management plans are used in programming and control of cutting and TSI operations on western National Forests.

X X The lower figure of timber should be cut until an accurate annual growth increment can be determined.

X X If we are to avoid a resource supply crisis in the wood products field such as the present energy flap with the too-little-too-late cost motion and recriminations, we must act now. The old TRR, Outlook Report, PAPTE Report, and many private and academic forecasts agree on one point: we will need all the large roundwood and probably see the pulpwood and other fiber we can grow on the National Forests soon after the year 2000. The trees necessary to meet this demand should be growing today.

X X In order to accomplish any of these three alternatives in a professional manner, the Forest Service has simply got to upgrade the training of its people in silviculture and logging practice. You can bet your bottom dollar that the engineering staff will demand and get personnel and equipment required to do the road building part of the job.

X X At least 75 percent of the reforestation and thinning money should be spent on the high production sites on the West Coast and in the South.

X X Differences between acres included in silvicultural exams and prescriptions at low, moderate, and high levels, imply that some quality of prescription will be done at all levels. At low and moderate levels, are we adequately funded to do a top-notch job, including coordination on these respective acreages? I don't think so. Some consideration of quality of management seems needed at different levels.

X X There are still thousands of acres in the Lake States that are practically barren of trees of any significant value. These areas once produced valuable timber and wildlife cover species. They were denuded by cutover and burned during the Peshtigo Fire era. Here more research and effort is needed to put this land into some kind of production of value.

Particular emphasis should be made on reforestation, apply thinning and other cultural measures.

X X I am particularly concerned as to how many reforestation failures and the lack of cover is affecting wildlife and fish habitat and watershed. These type conversions are in most cases very detrimental. Additional emphasis should be put on the high timber production forests where trees can be grown with little difficulty. This would spare the marginal timber-producing forests of R-4 and eliminate many timber and timber-watershed problems.

X X Regeneration should take precedence over other cultural work.

X X Utilization is improving but more can be done-exams, prescriptions reforestation efforts need to be increased.

X X As a first step we need to regenerate many acres of Forest Service land already cut. We need to properly dispose of debris (I favor broadcast burning where feasible) where biologically necessary or where fire hazard requires it. And we need to protect the soil from erosion, especially from those logging roads.

The reforestation program must be assessed, along with its environmental impacts.

VII-16, Timber Activities, 2d paragraph. The objective for restocking of cutovers on National Forests of the Northwest was "within 5 years" three decades ago. Today, the objective should be 1 year, whether you are on the low, moderate, or high program.

I would take exception to the emphasis on the provision of technical assistance to thousands of small woodland owners, however.

Leave information and education work to States. Extension work should be very minor in U.S. Forest Service Program.

Feel that the private landowners growing timber should pay for the assistance given them as any other business pay for assistance.

The intensive effort to bring about more productivity on privately-owned land, where owners may legally choose to emphasize timber harvest over other values, in some in principle, provided that viable sustained yield forestry techniques are promoted.

Timber supplies should be fostered by encouraging more intensive use of the 59 percent of commercial forest land in the hands of nonindustrial ownership.

Along with the program on Federal lands, of course, a strong program for private lands is of critical importance. However, I believe deeply in the individual-initiative-private-enterprise system and I believe that today's good prices for wood fiber are going to provide the incentive so long as good forest management advice is available to small landowners.

Small operators should be able to purchase material to supply the local fireplace wood market.

Hold service to woodland and forest products operators at the moderate level except move rapidly to high alternate in seedling and improved seedling development.

Under what mechanism does the Forest Service provide technical assistance to woodland owners? This is largely an activity of cooperative forests management and consulting foresters, and it seems it should be under the cooperation with States.

Technical assistance would help prevent waste on private lands--especially in the eastern United States where private ownership is high.

Small timber lot owners should have encouragement through government payment for good soil and production practices. (ASCS)

Federal support by adequate funding to meet the goals is imperative in order to provide the technical assistance to woodland owners to carry out a nursery production and distribution program, and a tree planting and improvement program.

X X More of our timber needs to come from private land.

Of particular need is landowner education, such as teaching them to do a large percentage of work.

X X I feel the Forest Service needs to make a greater effort toward influencing the management of the private timber lands. It has been known for some time that most of the best potential timber producing areas are in private ownership but are not receiving proper management. If the Forest Service could help bring these lands under better management it should take pressure off the public lands for providing wood products, thereby providing more opportunities for Forest Service to give more attention to the other resources.

The considerable increase in timber available under this alternative raises questions as to its feasibility while maintaining other values under Multiple Use and Sustained Yield concepts. These latter must be followed regardless of demand for any forest or range resource.

X Since much of the growing timber in the United States is on private land, timber management on these lands will need to be improved. We may have to advertise to make the owners conscious of the value of their woodlands.

X X Technical TM assistance should be left to extension agents, counties. The limited dollars should go to management of National Forest land.

More emphasis should be placed on technical assistance to woodlands owners, to upgrade privately-owned productive capacity.

Small woodlands are a chief factor for any quick and substantial increase in timber supply, and more is needed than any realistic subsidy increase. First, we must satisfy owners that they can have both timber and environmental values and then, somehow, motivate them to do it. Maybe regulation is not such a dirty word when things get tough.

This is a very low expectation of timber from small woodlands with the assumption of technical assistance. Comparing moderate levels, you show 17 billion bd. ft. per year on National Forests vs. only 1-1/2 billion per year on private ownerships, in spite of the fact that private ownerships cover several times more land. The expectations from technical assistance are meager, indeed, and only point up the fact that something more is needed.

It is hard to understand how the Forest Service can provide technical assistance to operators to increase their timber supply, when the board feet per acre production on Forest Service lands is less than produced on some private operations.

Suggesting that increased research and supervision could completely ameliorate environmental disruption at higher yields is sugar coating. It would be wise to increase technical assistance to private owners to the highest level possible since private forests must play an increasing role in the future.

A Federal program of assistance and incentives designed to bring all the high-yield lands in other (non-Federal) ownerships into full production.

The EPFF should describe the program of management assistance subsidies to owners of private woodlands, planned future subsidy levels, and the amount of increased timber growth anticipated from this program.

Private landowners and private lumber industries should be encouraged by the U.S. Forest Service to manage their holdings wisely.

The level of cooperation with States is tied to the level of activity on National Forests. Why not consider each separately?

Build in at least 60 man years of assistance to States in Northeast Regions to provide information to private landowners.

Get the U.S. Forest Service in gear before trying to help others. Very hard to get dollars now to do anything on the Federal land with present dollars, so planning should be concentrated to own problems.

- X X There is a pretty substantial S&PF program including particularly in the timber resource system. However, it needs to be presented in such a way that is not so completely overshadowed by NFS and Research programs.

IV. Emphasis will be placed on getting the Region's potentially most productive forest lands - regardless of ownership - into full production.

- X X Again due to increased environmental awareness of the public, I do not believe we can accomplish all tasks enumerated. If we cannot, I recommend we drop to "moderate?" on National Forest lands and continue with high in S&PF field.

At the same time harvest is curtailed in growth forests there is a need for an all-out effort to restore and reforest the millions of acres of cutover land, public and private, that have not regenerated following logging.

In the central hardwood forest, timber types in short supply should be encouraged on both Federal and private forest lands.

Clearcutting, page III-5. Could not clearcutting of large tracts be diminished--hopefully kept to a 50-acre maximum. Am more concerned here with the damage to trees than the "unsightly" nature of clearcutting.

Clearcutting more than problem of visual impact--concerns watershed regeneration in rough climates--adjacent blowdown--size of clearcut of significance etc., should be used properly.

Above all, we do not want any further desecration and ruination of our forests such as that which has occurred at Bitterroot which is now only a travesty of a forest and where a beautiful mountain has been turned into rubble slopes.

Clearcutting should be allowed only on level land and immediate planting of fast grasses; otherwise its use should be restricted.

Clearcutting is controversial not just for esthetic reasons as stated in EPFF but because it is clearly harmful where it is improperly used, such as on steep slopes or at higher altitudes and it is not clearly beneficial even when properly done.

Much timber is lost to overage. There, possible selective logging with removal by air should be done.

Clearcutting which has a severe effect on all resource systems should be detailed as to specific impacts of clearcutting on that system, i.e., reduced water quality, increased erosion, etc. This is a must for realistically approaching long-term timber resources.

When you say that because of public opinion you might favor partial cutting "even at the cost of lower growth and yield" the implication is entirely untrue for eastern hardwoods in fact the practice in most cases in the East may have a higher long-term value than clearcutting.

X X Page VII-56, Effects of timber harvest on esthetics. If the forests were regulated by means of cutting budgets based on in-place data, the problem of dispersing cuts over the forest would just about take care of itself in many instances. Of course, the current lack of adequate roads on many western forests is a serious obstacle, but the construction of an adequate road system should be of highest priority; that is, all alternatives should include this objective as a first step. It should be kept in mind that the location, size, shape, and timing of harvest cuts will create the pattern of stands that will determine the flow of wood during the next rotation.

X X Another point about clearcutting--we should point out that as practiced in a managed forest, it is done under a management plan which relates the amount of timber cut to the growth rate, so that the popular image of clearcutting as uncontrolled exploitation of the National Forests is wrong. Clearcutting is a silvicultural practice under even-aged management of the forest.

X X What is meant by "partial cuttings?" If we mean the selection system, that terminology should be used. If the reference is to seed-tree and shelterwood cuttings, we are still talking about even-aged systems, and the stands must be cut completely sooner or later, especially the shelterwood.

Clearcutting is discussed in the last full paragraph of page VII-16. These circumstances do not adequately describe the primary motivation for the use of clearcutting on much of the old growth western National Forests. The motivation is the necessity for removal or other disposal of large accumulations of wood debris on the forest floor and of standing dead and defective trees as a prerequisite to purposeful timber

growing activity. Another important fact not mentioned is that clear-cutting is the only feasible method for harvest of timber occurring in dense stands or on shallow soils and of species with a shallow rooting habit. Extensive use of partial cutting in these kinds of stands will invite devastating windthrow disasters.

Clearcutting Controversy: More research is needed on the question of how to measure and evaluate aesthetic factors and balance them with other values. We are glad the Forest Service recognizes the adverse impacts clearcutting would have on the environment.

As to clearcutting, I suggest you keep up with your own research. Present monstrous slash accumulations from clearcutting invite fires--as M. Heinselmann has noted for historical catastrophes in the Lake States. These fires ensure lack of successful regeneration. On p. III-5 I should point out that clearcutting is a treatment which removes the old stand. Your statement that it is done in order to create a new forest stand means most clearcuts I have seen are total failures. Obviously, however, they did not fail to remove a stand of trees.

It isn't only that clearcutting in the East "looks bad"; it is that the practice has been greatly abused resulting in long-term loss of yield and timber value as well as environmental values. To say only that it "looks bad" is only the partial truth and misleading.

In the first place, EPFF does not accurately set forth the scope or scale of clearcutting on the National Forests. The EPFF says that clearcutting is a "technique used primarily for those species that cannot tolerate shade, are subject to windthrow, or for other reasons grow best in even-aged stands." (pp. III-5). The implication is left by this statement and the discussion in general that clearcutting is not the major timber cutting method employed by the Forest Service. However, a review of Table VII-8 on page VII-59 of the EPFF shows that clearcutting is in fact the major timber cutting method. Furthermore, the discussion does not reveal that the cutting methods known as "seed tree" and "shelterwood" are very similar to "clear-cutting" and present more or less similar problems. Chart VII-8 shows these methods together with clearcutting constitute almost the entirety of the Forest Service's timber harvest. Selection cutting is only 6 or 7 percent of the total! Thus clearcutting is designed to inaugurate a vast environmental change of profound ecological importance in the nation's forests. The natural forest of the past will have little place in the new scheme of things. Unfortunately, the EPFF does not address this matter at all.

We were very pleased to note that the Forest Service is planning a wholesale switch from clearcutting to shelterwood. This is the method we have been advocating. It has many advantages. Not only does it keep a forest cover on the land, but it also offers opportunity to guide the type of reproduction to be secured.

X X Favor use of clearcutting when silviculturally sound.

On VII-16 you say clearcutting "is now applied only where it is determined to be silviculturally essential to accomplish the forest management objectives." Yet in practice your clearcuts range from 40 to 160 acres. I cannot possibly imagine a situation in which openings that large are necessary for the purpose of obtaining regeneration of certain species.

In regard to clearcutting, I don't feel it is all that bad, what could be done is for more use to be made of the slash leftover. Also instead of relying on natural reforestation, more use could be made of artificial means, particularly the planting of seedlings as soon as possible after an area has been clearcut.

Hope more effort will be put forth so that clearcut areas are more pleasing to the eye. But again, the main emphasis should be on getting these areas back into timber production as soon as possible.

Go along with this Forestry Plan, as outlined, with the exception of the "clearcutting" program. The public, as a whole, is in my opinion, completely opposed to clearcutting. Agree with these other natives, of which I am one, is that we honestly believe the sustained yield program is the best--coupled with the multiple use program and plan. "What are we going to do while waiting for the fifty-or sixty-year-old trees to furnish them or their children with gainful employment. They argue that an entire generation of living people will have been lost.

A lot of space has been devoted to clearcutting in this document. I am dubious. I do not favor the practice of clearcutting in Idaho. However, I do favor increasing the production on good sites on public and private timber land.

The EPFF should indicate under what soil or topographical conditions clearcutting is harmful; which species, if any, require clearcutting for regeneration; and what guidelines the Forest Service has adopted or plans to adopt to minimize the environmental impacts of this technique.

The sites which have greatest timber production capability are often the same areas which have greatest potential for all other Forest Service programs--timber harvest must be made more compatible with other resource and use considerations.

Congress must act to assure that the limited lands and resources that remain on the Bitterroot and other forests are not subjected to further land and resource abuse. Unless members of Congress redeem this responsibility, the National Forest System is fast heading to become a non-productive wasteland. This will result in imposing more depressed economic and social consequences upon people who depend upon the many values inherent in these publicly-owned lands.

It is my contention that the U.S. Forest Service is still a timberman's agency firstly, and secondly, a grazing agency, despite a really sincere effort in some parts to expand beyond that historic limitation.

The statement, "Forest Service Programs will have a dominant influence on softwood timber supplies in the next decade and therefore affect lumber prices." (page VIII-3)

For the first time recognizes the dominant position the National Forests are in with respect to softwood sawtimber supply.

Forest Service adherence to even-flow non-declining yield and its refusal to recognize its significance is blocking progress in solving the Nation's timber supply problems.

Finally, "vegetation management through timber management projects" in connection with the land and water, and wildlife and fish habitat systems should be listed under the timber management program.

The forests of the United States are absolutely vital to prosperity and well-being but I don't think this point is made. Why not bring out the welfare and success of a world power is related to renewable resources. To maintain and increase the services and values of the forest makes for strength, prosperity and well-being. To manage the National Forests at less than full potential makes them the Nation's greatest neglected resource and we are not prosperous enough to treat our resources with such disdain.

It seems that the Forest Service has a vested interest in attempting to protect and promote certain long-standing obligations prior to listening to the whine and cry of every preservationist group that comes down the pike.

It frequently appears that in Forest Service concerns for resources systems, timber management is relegated to the low end of the spectrum. For instance the systems display charts in Section 5 require modification or adjustment of timber management programs in order to adequately develop programs for recreation, water, wildlife, etc. When these other systems are presented, however, no reduction or adjustment is cited in order to coordinate fully with timber. This kind of treatment of relationships between the various proposed programs is not fair.

Aesthetics, watershed values, mast and den trees for wildlife, balanced age classes, and a reserve for national emergencies must all be considered and interrelated with timber harvest practices.

X X With the energy crisis we have and will have for a long time, trees are most important as our most valuable "renewable" resource. It requires less energy to convert trees into lumber, plywood, hardboard, etc., than with substitutes for wood products.

X X Timber production should be increased from public lands through more intensive management, but we should not be in such a hurry to greatly accelerate the harvesting of our older age-classes which occupy only a small percentage of our commercial forest, especially in the East.

- X I am against widespread adoption of so-called high yield forestry if it means exclusive harvesting by clearcutting and the planting of nursery trees applications of fertilizers, herbicides and pesticides and single species even age timber stands...the long-term productivity of such a system has also to be proven...I favor a type of silviculture more in tune with the total environment. The harvesting method would be individual or group selection, shelterwood or small patch clearcutting. Light selective thinnings through all age classes would be used to promote growth and quality. Clearcutting is justified as the most economic interests and pressure from Washington to get the logs out at any cost.
- X X Not enough emphasis here towards funding - current activities so that quality work can be accomplished. There is too much of a tendency to emphasize increased harvest rather than a fully balanced environmentally compatible program.

Timber is by far the most important factor in the management of our National Forests. Furthermore, most of the multiple use values are dependent upon the manner in which the timber is managed.

Until the Roadless Area Review and Evaluation (RARE) study is completed for potential wilderness areas, the conflict of timber versus wilderness will remain unresolved.

None of your alternatives have presented a balanced forest system, as required under the Multiple Use-Sustained Act of 1960. The major emphasis is on timber production and development. Your activities and points of utilization under this system indicates to me that they are heavily oriented to one, single use.

We note that very little attention was directed toward operator road construction erosion control measures, building helispots and falling snags that represent direct dollar investments from timber sales that the general public is not fully aware of. These points should be brought out to identify accomplishment as well as expenditures that reduce payments to the United States Treasury.

A data comparison is needed between the three proposed timber resource levels and the acres of slash burning involved, the acres of "buffer zones" required, the amount of pesticides utilized, etc. Furthermore, the benefits and costs of these activities must be analyzed in greater depth.

Recheck the estimates of revenue for timber sales in table VII-5 on page VII-39. For instance, revenue estimates for F.Y. 1979 for the high alternative are only five percent more than for the low alternative.

Our principal criticism of the report, however, is that it does not give due consideration to eastern, particularly northeastern, conditions and problems. This is true of most generalized Forest Service reports and is probably unavoidable if they are to be kept down to a reasonable size. But while many of the statements may be true of softwood stands in the West, and even in much of the South, they certainly do not hold true here.

The slash problem is included under the fire prevention category so it is not a major factor here. However, the cost is a major factor, yet, there are no indications given as to alternatives in that matter.

VII-59. Extensive Hardwoods -- conifer changes should be avoided, as you predict.

On your projected demands, you are assuming no great increases in prices. However, within the inflationary situation the purchase power is getting lower and lower. It means that if the projected demand is the same, the prices will be higher, or on the other, the demand will shift downwards.

Housing starts are NOT dependent on the price of timber, but on the price of mortgage money.

The high option for timber management conflicts with the current Forest Service policy on non-declining yields. Although some wording seems to approach this apparent conflict, the draft does not adequately address itself to this major policy decision of maintaining a non-declining yield philosophy. In view of that, some question is raised if the high timber management option can truly produce the yields that are indicated. It is strongly recommended that the current Forest Service policy on even flow non-declining yield on timber management be re-evaluated in this light.

The intimation is that adverse effects from increased timber harvest are comparable to those from strip mining. It is unclear just why this discussion of the adverse effects on water of increased mining activity is included in this Chapter which is dealing with environmental effects of the activities described in Chapter VI. There is nothing in Chapter VI to promote or expand mining activity. This paragraph should be eliminated or revised.

There needs to be a stronger recognition that our National Forest with 52 percent of the nation's softwood sawtimber inventory are the key variable in providing the supply necessary to maintain reasonable prices in the foreseeable future. This item should be discussed more thoroughly in the second draft.

Indicated levels of output from non-federal lands are not realistic.

I take rather strong exception to the statement, "cultural treatments that involve partial cutting of the stand result in a minimum of soil disturbance."

X X Many of the assumptions in our yield estimates may be too optimistic. Our forest are generally poorly stratified as to productive potential and vegetative habitat.

Basic assumptions and policies, such as the present National Forest evenflow policy, strongly affect the National Forest Allowable cut. These basic issues should be presented for public discussion and decision.

A fundamental defect in the EPFF is that the timber program is premised on the basic concept of evenflow. Using Forest Service data and technique, we have shown the tremendous waste of timber that results from this policy (page A-2). Further, it is indeed discouraging to read (page VII-29) that "National Forests would continue to provide about the same share of total national consumption--17 percent," when they have 52 percent of the softwood inventory on commercial forest lands and their average current growth is only 41 percent of potential (page VII-30). This performance level compares with 63 percent for the forest industry ownership, according to your data. When is the Forest Service going to become a leader in the practice of good forestry?

- X X There is no total job or dollar costs shown to make it possible to see the whole job to be done. It makes it difficult to select a level of funding when these facts are not even estimated and hence I would choose the moderate level which is a continuation of the present level of slow development.
- X X II-8. Improvements, roads and trails, etc., all merge under subheading of timber. Suggest a new subheading and also expansion of the minerals, coal, and oil discussion.
- X X Impacts of timber on other resources for the recommended harvest levels are impossible to evaluate.
- X X You have totally excluded fuel management, a very contributing factor to any intensive management.
- X X There is no estimate of the magnitude of the total job that needs to be done nor of what percentage of this total each alternative represents. Such estimates would make it easier to choose an alternative. There is no opportunity.

The discussion should show what effect private construction has on timber sale receipts, and consequently on the amount of money returned to local communities.

The Plan, however, should in addition address itself to the question of how such programs are to be paid for--whether the principal source of funds should be general tax revenues or the producers and users of timber products. The latter should be the principal source of funds, so that the users of timber products will pay more of the full social costs of their production.

While we unanimously urge the implementation of the "High Supply Alternative" over others outlined--we question whether even this proposal is sufficient to meet the growing demands for wood fiber products--or to enable us to fulfill our role in exporting such products to provide for our economy or to help meet our nation's balance of payments.

Eliminate all export of forest products to foreign nations.

We believe your high supply alternative for the timber resource system as described in the subject draft document would represent a reasonable first step in taking those necessary actions as outlined in the about documents.

Even the high program level, at which the National Forests would supply the timber for about 20 percent of National lumber supply needs, are inadequate as a target contribution from the National Forest System which holds 52 percent of the softwood sawtimber inventory of the Nation. The Forest Service, which prides itself in being a leader in forest management, should not be satisfied with lands which are producing at only 41 percent of their potential (page VII-30). Industrial forest ownerships are averaging production levels at 63 percent of potential. If there are valid reasons for this apparent inconsistency, these reasons should be discussed in the EPFF.

X X Timber should be supported more heavily than in the past but there is no way the National Forest System can pick up the slack for the abuses of private holdings. There will be a publicity backlash against moving to the high level of timber management without going to the high level in other activities first. A selling job is needed and our credibility needs to be reestablished as a prerequisite to high level in timber.

X X The days of extensive TM are over; the high supply alternative presents a beginning toward "intensive" TM which has been so slow in coming.

X X High objective not compatible with high timber resource system alternatives.

A number of recent reports have pointed out the critical importance of non-industrial private forest lands (e.g. 1973 Report of the President's Advisory Panel on Timber and the Environment, etc.) Yet, even under the draft EPFF "high supply alternative," management plans will be prepared on less than two percent of the eligible non-industrial private forest land area over a five year period. If the program is cost-effective it should be greatly increased.

The recommendations made by the President's panel are concurred with, and would reflect the high activity level.

X X Timber sales offerings and allowable harvest should be at this alternative. Increased allowable cut through planting, thinning, and road access is too often more imagined than really based on over optimistic growth factors and completely overlooking constraints. Too many National Forests are presently overcutting and balancing growth with cuts existing only on paper. When timber stands are reentered for harvest every 12-15 years on a 20-year

cutting cycle, something is wrong. Increased allowable cuts should be attributed only to demonstrated improved utilization. Thinning and cultural measures should be at this level, as should technical assistance to woodland owners.

High supply alternative will give better data for decisionmaking, faster approach to even-age distribution, and sustained yield along with needed cultural work.

Have reservation about high alternatives. Perhaps halfway between moderate-high or pilot high level programs in some areas to see what can be done would be better.

The high option will possibly create more disturbance in the National Forest Systems than the public is willing to accept.

If we fail to reach high alternate goals for any reason other than available finances we are not doing the job.

It appears from review of the Timber Resource System that all three proposed levels exceed our present level. What are the economic consequences of the increased production -- is it worth the investment? This same question can be asked of the other activities.

If this turns out to be inadequate, I would recommend the high level alternative as long as there is adequate funding available to do the total job.

We should avoid the crash program that moderate and high propose. This would be better than getting too ambitious, overhiring, etc., and then having the program die out.

I question whether the allowable harvest can be increased to the high level by measures suggested -- this is based on assumptions that may not work in practice. Also, there is no discussion of the tradeoffs involved.

Appears to be a large program, will this provide a more balanced budget? Good to indicate present level.

There are no basic statistics against which to judge the numbers given in the alternatives. It is not automatically apparent that either the medium or the high supply alternatives are compatible with the concepts of multiple use and sustained yield.

We are subject to massive criticism for failure to lead the move to improved utilization rather than waiting for industry to tell us when they are ready to use more. Condition of award of public timber should be predicated on complete utilization.

Gus Pearson's study from 1908 on to his death demonstrated clearly that clearcutting has no place in the management of ponderosa pine type or the mixed conifer on deep soils of the Southwest. There was plenty of reproduction when good seed crops were followed by good growing conditions the next two years, and where competition from grass was minimal, but then the result was "dog hair" stands requiring expensive pre-commercial thinning. In summary, I strongly recommend that the Forest Service stop spending funds for sophisticated Timber Management plans, pre-commercial thinning and planting anywhere except on old and new burns covering the best timber sites of the Southwest and Intermountain Regions. Let nature take care of the timber growing, otherwise.

So much wood is wasted, not only in poor utilization but in making junk that isn't needed, paper products that we could do without, etc.

A lot of logging in Idaho seems to be going on for no other reason than that the local economics depend on it.

The Forest Service should not support existing mill capacity in the face of environmental or economic reasons to the contrary.

If one were to endorse maximum yield, under the Forest Service plan would the methodology of private forest care be extended to the National Forest?

To achieve the many valuable purposes which Congress intended for the National Forests, the people must insist that members of Congress hold you and your subordinates accountable to enforce, without fear or favor, the laws governing the management of all of the resources entrusted to your care. It is imperative that this action be taken to prevent imposing more ills and scarcities on the people who are dependent upon these assets for their livelihood as well as their way of life.

"Pressures for increased timber production have led to extensive violation of the spirit of the law, if not the letter, intended to preserve the forests in perpetuity."

Although its dynamics may seem unstable to us at times, the price of timber rights should be increased so as to encourage timber interest to expand their private holdings and bargain for timber rights on other private acreages.

Congress must be convinced that more money is needed by U.S. Forest Service to meet these goals.

For a country as prosperous as the United States, there is much sub-standard housing. A more productive forest resource would help insure that adequate renewable materials would be available.

Utilization should be governed by existing economics not just a desire to sweep the forest clean and transferring of environmental problems out of the forest to other areas.

Taxing procedures are a critical factor in retaining non-industrial forest-lands for production of forest products.

Some people may find timber harvest areas offensive to their way of thinking. What we are pointing out is, do not over react to esthetics.

People in our western forest need to be made aware of the beauty of a young vigorous second growth forest and not think that only virgin stands are our tree forests.

We were disappointed not to find any consideration given to how other countries manage their forest resources. For example, the Canadian use of the "working circle" to permit no more sawmills in an area than the area will support on a sustained yield basis we believe is rather intelligent.

Several prominent public figures (Secretary Morton-Barry Commoner) have pointed out the need to substitute wood for other materials on environmental and ecological grounds. The balance of payments issue figures here because wood (along with food) is one of the commodities the rest of the world wants from us.

Perhaps the consumer is unconsciously relying on the industry to speak for it. Yet, when the forest industry makes its case it is too often looked on as self-serving.

We have evidence that minority groups and other urban interests are beginning to become interested in this problem.

As is so adequately presented in your program, the volume of National Forest timber harvest greatly affects the cost and availability of housing. On a one man-one vote basis, I would venture to say that housing concerns affect more Americans than are offended by aesthetic changes. The aesthetic changes are only temporary and inflict no physical effect on the viewer or his well-being, whereas the houses provided have a profound effect in a positive way on several generations of families.

I did not see anywhere in the program any reference to the need to develop a program to increase salvage of mortality to prevent waste. This should be done for the benefit of all concerned and can bring material to market that is otherwise going to waste.

The tax climate should be comparable to earning power for the private timber owner. Policy limits could be set up by Federal authority through the Department of Agriculture.

We must have extremely efficient utilization of our wood products, paper recycling is a necessity.

I question very much whether this can be accomplished even if there is a tremendous increase in money available. For the past few years there has been very little hiring done at the lower professional levels.

XX Increase in utilization of tops or cull logs in Arizona would probably decrease the amount of thinning done in pole stands which would hurt increase in growth.

EPFF is resurrection of many of the elements of the National Timber Supply Act which was defeated in the Congress in February of 1970.

XX The Forest Service could be doing a lot more with the money it has than it is. A good example is the timber sale appraisal system. It's a technically sound approach that doesn't work worth a damn in much of the East, but for sake of pride or whater, we continue to waste time and effort using it. When timber is appraised and advertised at prices the forester knows are too high to sell, he is wasting his time and the taxpayer's money. The Land Law Review Commission had a recommendation on this but I never saw it mentioned at the level I work at. So we still have lots of manpower busily accomplishing nothing.

XX Overhead is very high. When 50 percent of the project timber funds allotted to a forest is used by the Supervisor's office, as general administration, it's time to look for a more efficient system. And no telling how much was used on the Regional Office and Washington office level.

XX The Forest Service has lost the depth in qualified personnel necessary to go to the "high option."

XX Lasting benefits, specifically in poor, low standard roads that are lost to erosion and decay of imbedded wood fiber; landlines run by hand compass for expediency to "get the cut out." Don't kid yourselves just because the manual says these are the standards they are not always met--more often than not they have not been. Few middle management people can stand against the tide and put quality before quantity.

XX I favor low if increases of intensity means nothing more than more roads, more erosion, more unrestricted public areas, more cutting, and a higher "required" cut.

XX Use the coming years to gradually build up personnel and experience levels of same.

XX Timber is renewable; competitive resources are not. Our renewable resources should be used at a study, moderate pace.

- X Regarding heavily overgrown second-growth mixed hardwood areas of northern Minnesota, Wisconsin, and Michigan which were formerly large producers of white and red pine and reforestation. This under-utilized land desperately needs to be put to use in this sparsely settled, chronically financially depressed area.
- X X The management of a greater effort than this level could cause problems in implementation.
- X X Forest Service is the lead agency and must provide leadership necessary to meet its change. Undoubtedly, will continue to be subject of great controversy.
- X X Forest Service does not get enough funding now to do a good job of timber management. To tie increased funding to more production will not result in improved timber management--just more logs and an increased workload.
- X X Congress must be convinced that more money is needed to meet these goals.

I feel that the U.S. Forest Service should have the sole control of managing timber on all government-owned lands with the United States.

Program does not discuss insect and disease control.

Studying people's reactions to various degrees of partial cutting; is there a point at which people find the level of cutting acceptable, if care is taken in harvesting?

None of the negative outputs are given, in spite of the fact that these are inevitable.

Logging companies do not pay attention to conservation or particular methods. Planting Douglas-fir in a zone meant for Mountain Hemlock is a rather poor excuse for high yield forestry. Douglas-fir is not the only tree but lumber companies are trying to make it so.

Object to the use of the "offensiveness" related to clearcutting III-6. Actually the failure here was a poor selling job coupled by a small segment of the population who set out to destroy the National Forest system and the Forest Service and build a wilderness and National Park System.

VII-56 Visual values are those established by a mind accustomed to assessing them based on a person's training and experience. The intensive management of forests in Switzerland, Germany, and Sweden is very pleasing to see. It is true this alters the landscape but it is not repugnant if one is trained to understand it.

VII-70 "Man's intrusion" is a repugnant term. Man is not a foreigner to earth and is as native as any of the animals. He must utilize the resources and by Biblical terms was so directed.

The Forests should be looked upon as a natural habitat from which we can also draw needed resources. Their stability as a natural unit has been assured over millions of years of evolution. A few regional monocultures (e.g., Douglas-fir in the Northwest, Longleaf Pine in the South) could seriously upset this sort of balance creating a temporary abundance which would be highly vulnerable to pests.

Believe only selective cutting should be done where multiple use of the Forest (by this I mean recreational, camping, trails, etc., are involved).

On page VII-16 it is stated, "Clearcutting is now applied only where it is silviculturally essential..." This is simply not true. I suggest an inspection of the National Forests in the Northern Rockies so that you may learn that to merely say so on paper does not make it true.

Our Nation's Forests are slowly reduced to farms needing cultivating, weeding, planting, pesticides, and other energy subsidies.

Leave all remaining virgin timber stands intact and untouched for future generations to manage and enjoy.

Keep clearcutting to a minimum. In those instances where clearcutting is required for seedlings, keep the clear cut areas small and numerous.

It is the thought and recommendation of this Respondent that the primary emphasis of the next draft of EPFF, give priority to the historic functions of the Forest Service for which it was created, namely to protect the National Forests, to preserve water flows, and to assure a steady stream of products from National Forest lands to supply the needs of our Nation.

We feel that the National Forests should NOT be operated as a profit making business.

The mission of the timberman (VII-30) again slips out in "The rate of conversion of old-growth stands to young vigorous stands is a major point of controversy. Essentially, productivity is being curtailed because of current demand for minimizing esthetic disturbances of forest landscapes."

Aerial spraying programs to my knowledge are unsubstantiated by a single broad ecological study involving the total vegetation. The rationale, which arose within the chemical industry, appears to be that of a simple "system" of chemical versus tree species--ignoring all the rest of the total environment and the larger ecosystem.

Silvics and Silviculture. The success of any forestry program rests on a solid foundation of silvics (forest ecology) and silviculture (the application thereof). As a field of knowledge, I find no clear recognition of these subjects, although the details are scattered throughout.

I find no scientific recognition that silvics and silviculture, and thus forestry itself, are in turn based upon a Vegetation Science.

In Respondent's view the primary uses to which the National Forests should be put is production of timber and minerals. Other uses should be subordinated to these uses.

The Forest Service in Alaska is understaffed and underfunded, and is therefore unable to give adequate attention to the primary needs of increased output.

In summary, a large part of the wooded land of Southeastern Alaska can loosely be described as a near climax forest, in which many trees are commercially "overmature," and a portion are decaying. Replacement of the forest with second growth timber would more than double the per acre yield.

Clearcutting should be made to appear natural. Even at best only small areas should be clearcut to limit adverse effects on drainage basins of sedimentation and the flow of springs in areas of winter snow pack.

I would be willing to sacrifice many amenities in order to enjoy the Forests in their present state.

The estimate of environmental impact upon water quality is most misleading. The dominant effects of watershed disequilibrium and stream eutrophication through nutrient imbalance are not even mentioned. These effects will increase with the high extraction alternative. The statement that sediment yield can be kept near current rates under all alternatives is directly contradictory to the research material which the United States Forest Service has developed on the subject. The only proven means to reduce sediment yield is the use of pre-planning and soils mapping to show where timber cutting and road construction cannot be accommodated. The arguments used against mining roads are precisely those which can be used against timber extraction roads in any of the three options.

X X Better utilization is better than cutting more timber.

The proposed increased allowable cut is rationalized by extending past trends in population growth, housing start, GNP and personal income increases. In some cases, the base data is incorrect; in other cases the growth is overestimated. In all instances the projection does not include a change in rate of growth. However, as seen in the recent energy crisis the rate of consumption can change; demand should and will change as shortages of other natural resources develop. Instead of fostering increased wood supply the Forest Service should begin an education program to encourage the decreased personal consumption of wood products. More emphasis should be put on investing in the most productive sites and where economic returns are highest. These sites should be intensively managed. Money should not be wasted thinning and reforesting mediocre sites. Communities that desire a more conservative approach to timber harvesting (particularly where massive timber harvests are not biologically sound) should not be penalized, nor should extremely productive areas receive a disproportionate amount from timber receipts.

At one point (Page A-35), the statement is made that "At 1970 prices and current levels of forest management, softwood sawtimber supplies would fall 20 billion board-feet short of demand by the year 2000." If this is true, then the real crunch is long-term in nature, rather than being a question of meeting national housing goals for 1976.

The log export situation to Japan should be investigated and a firm position taken by our government.

The EPFF assumes that National Forests should provide a larger share of the Nation's (and world's) glutinous desire for timber. This is a highly debatable question which should not be blithely assumed.

It should describe Forest Service programs and research to conserve the use of timber in the building industry and encourage the recycling of wood and waste paper, and their potential for reducing the demand for virgin wood.

The Forest Service projects an increase in the demand for timber at a rate of 18 percent to 32 percent per decade until the year 2000. The EPFF should indicate to what extent this demand can be met through programs to increase the productive capacity of the National Forests and to what extent it must be met from private lands or imports.

In the long run, and in the final analysis, the protection of our forest resources are of first importance. Then follows the management in such a manner as to assure a high volume, high quality timber product from the land which will provide the country with an ample supply of wood and wood products, at a reasonable price, to furnish those basic necessities for which trees constitute the most economic source of raw materials.

The prices need not be officially low, however, to allow for housing for the poor. Specifically, housing for the poor must be subsidized in one way or another.

The increased productivity through technology sounds great, but don't forget the law of diminishing returns. Will you really be able to encourage faster growing forests forever to justify more cutting?

What happening is that small groups of our society are becoming very effective at curtailing timber production from National Forest land via NEPA (1970) and other legal tools. This is allowing large price increases resulting from more strict environmental protection measure are shared equitably by 1) society in general and 2) interests and organizations who lobby for such restrictions.

Cannot understand why we must rape the Tongass National Forest to supply lumber to Japan.

Assuring an adequate flow of timber and minerals from National Forest lands to meet national demands and balance of payment objectives.

Efforts must be made to increase recycling of wood fiber and improving processing and products design--and anything else that would lead to reductions in projected demand, without drastic increases in price. Efforts to increase supplies should be concentrated on private lands.

The analysis should have shown each use for timber and other forest products and the estimated social value of that use. The American public may be quite willing to allow timber operations for low cost housing (if that were achievable) but may not believe that increased environmental damage and resource depletion is worth the values of products. Although the report seems sensitive to employment effects in the forest industry, it does not describe the magnitude of the lost employment which results in other industries when underpriced wood replaces other materials and services. It may even be true that as stumpage price increases, the amount of labor employed increases at

various production and handling stages to assure lower losses of saw timber. The report does not describe research and policy which increases employment for lumber operations by any technique other than by increased sales.

In one of the most unusual aspects of the report the authors neglected to describe the desirable resource allocation and environmental protection of higher timber prices. If prices are too low, consumers waste valuable products. Similarly, a low price for products harvested from public lands may drastically lower the market price of products from similar private lands. If prices are too low, private landowners are not compensated sufficiently to recover the costs of long timber rotations. If prices of stumpage are low enough, the landowner may prematurely harvest the standing timber and irreversibly convert the land to the higher paying, but perhaps less socially valuable uses, with less internalization of environmental costs. In some cases, land is stripped, destroyed, and abandoned. The social advantages of low priced timber today may be much less than the disadvantages from private response on other forest lands. A clear message of the plan to private landowners is that the U.S. government has a lot of timber land and that they intend to keep the prices low even if it drives large amounts of private land permanently out of lumber production. Landowners are told that they cannot expect appreciation in their timber lands as great as for other land uses.

Monies called "Revenue from National Forest Timber Sales" which are presented to measure the contribution of resource harvest to national economic development are in fact arbitrary. Rather than estimate the expected price times quantity, the analysis assumes that GNP will increase and that forest revenue will remain at the same relative level! This estimated quantity of revenue, thus, is independent of actual extraction and price! The values of table VII-5 (if interpolated 1975-1979 values are summed) do not even roughly correspond to other estimates on table VII-4. This backward analysis (working from arbitrary estimates of results back to assumptions and data) is not an accepted economic technique.

Look at the Arabs and their oil. The world needs wood fiber just as seriously--and that we can grow, forever, if we get at it. Wood fiber could become just as powerful a world political tool as oil is now--and it would last a lot longer.

We should not be cutting our forests for export in an effort to eliminate balance of payments problems caused by the gluttonous consumption of imported oil.

We should also reduce allowable exports. United States taxpayers should not be expected to subsidize the forests only to have them exported in exchange for cheap toys and automobiles especially when the U.S. auto industry is in a crisis situation.

Feel strongly that some priority should be given to averting "demands/pressures" on our timber resources, especially for foreign interests versus domestic.

Discontinue exports of lumber to Japan. Resources from land belonging to the American public should be reserved for use in America in this case.

Logs should not be shipped to Japan, nor should companies selling logs to Japan be allowed to bid on National Forest timber.

There is no discussion of the impact that an increase of 73 percent in reforestation activity will have on future timber supply beyond the ten year period. It is felt that this is an important consideration since the period of year 2,000 and beyond is forecast as an era of timber supply deficit.

The increase in allowable cut in 1984 between the low level (16.4 billion board feet, and the high level 20.0 billion board feet) are not particularly impressive and appear inadequate as the target contribution to national needs from the National Forest which holds 52 percent of the softwood sawtimber inventory of the Nation.

Rny sales of timber for export should be kept low until adequate replanting, improved utilization and a refined allowable yield model--have been completed.

The use of substitute materials is clearly not the solution for easing the future demand for wood products. Wood is a renewable resource; aluminum, steel or other substitutes have a fixed supply. In addition, these substitutes require more energy to revocer and process, and present more serious air and water pollution problems in their manufacture.

It must be evident to all concerned that our country needs every pound, cubic foot, board foot, etc., of wood fiber that can possibly be produced with proper forest land management. The tremendous versality of the renewable wood fiber resource certainly indicates that we must look to wood fiber for many of the products now found in a non-renewable condition; e.g., chemicals, petroleum, natural gas, etc.

If we are to come out of the housing and construction slump and are to meet the demands of an ever growing number of potential home buyers, it is necessary to place strong emphasis on managing timber.

In our opinion, the reported harvest levels are all far below the acceptable level the Forest Service should be contributing to supply the national needs for timber at reasonable prices.

The EPFF should also discuss the effect of reasonable alternatives to present Forest Service policy, such as that of abandoning the agency's present "even-flow, non-declining yield" interpretation of sustained-yield forest regulation, on the ability of the National Forests to contribute to supplying the Nation's wood product needs.

Somewhere it seems to me that estimated needs or demands should be related to production capacity of the land. Can demands be met with our basic soil resources? This was stated in the "Outlook" but seems to be masked in the Environmental Program.

Timber management in Region 5 is out of balance with other resource systems resulting in conflicts with the other systems. Timber harvest must be contained within reasonable ability of individual districts to incorporate quality along with quantity demands.

The discussion of economics is simplistic. There certainly are well qualified economists who would argue against the statement that "price increases can be limited only by increasing output."

The document implies that we as Americans can literally have our cake and eat it too--meet ever greater "demands" for timber, construct more roads, maintain more camping facilities, provide more grazing, have better water quality, better wildlife habitat, increase the Wilderness System, provide more research, etc.

The EPFF should discuss the factors which indicate that the real unit costs of producing lumber are going to increase, and relate this to the ability of timber to compete with substitute materials.

The EPFF does not state its premises explicitly. What do the timber demand projections assume about timber utilization and recycling of wood products? What elasticities of supply and demand are assumed for timber? On what are the projections of recreation demand based?

X X The NFS has an obligation to uphold its proportional share of timber supply.

Annual amount of timber harvested from virgin areas in National Forests in North coastal areas is not large enough to meet public demand.

One is left, however, with the impression that the Forest Service is just giving lip service to the goal of meeting the needs of the year 2000 by getting the Nation's most productive timberlands into production. The report makes no concrete proposals for achieving this goal; its actual objective, it would seem, is simply to get funding for National Forest timber management. This policy will serve the near-term needs of the western timber industry, but it will poorly serve the long term needs of the Nation.

Subsequent documents that deal more specifically with a strategy and information format for forest management are necessary. There is nevertheless an intense concentration throughout the Plan on greatly increasing the supply of timber products. Instead, the main focus should be on resource conservation as the chief way of alleviating many of the problems outlined in the Plan. Far-sighted private sustained-yield practices should be rewarded.

X Much of the wood and fiber now consumed by American public is not necessary or even wanted.

There can be no doubt, however, about the need for more wood for better housing. M.I.T. and Harvard University recently reported that 20 percent of the Nation's households are suffering housing depreviation. Dr. Anthony Downs said that 2½ million more households would have been able to afford the average-priced home than can afford it now, if lumber prices had not risen since 1967. The artificial shortage of timber from the National Forests has been a major contributor to the scarcity that has caused the rise in lumber prices.

X It would be wise to not combine all sources of supply since the production costs vary tremendously between private and National Forest lands. We are still trying to put costs on intangibles.

X Should point out imports as well as exports.

X Energy availability will be a big influence on consumption.

Demand for timber over the next 10 years at least will not increase at the rate forecast. Sales to foreign Nations (notably Japan) should be halted. The average American consumer is more concerned with the price he has to pay than he is interested in maintaining an artificial balance of trade.

X Timber in foreign trade should present a balanced picture by presenting import figures for wood and wood products.

XX Demand for timber is projected to the year 2000 on the assumption that there will be no great increase in prices. We feel this is an unrealistic assumption.

XX Sale offerings should be based on capacity for sustained yield, not temporary shifts in demand.

Keep exports of board feet as low as possible or eliminate exports altogether.

We need also to put a stop to the sale of national forest sawlogs, etc., to Japanese interests and other possible foreign nationals.

Care should be taken that demands of timber buyers or specific types of wood does not unduly influence forest type and composition.

Timber products should not be shipped abroad unless products made from our supplies are brought back for our use.

Even if the levels of harvested timber reach those indicated under the high option, the studies described in the cover letter to these comments indicate that the total national timber supply will still fall short of the true needs of the United States and the World.

The following principles should serve as guides to decisions in the matter of producing timber supplies.

- I. Planning now for the long term timber supply is of overriding importance. Short term goals are secondary.
- II. The goal is the highest level of sustained-yield timber output consistent with important social, economic, and environmental requirements.

The discussion of timber demand is interesting. It opens with the statement "Timber demand is keyed directly and indirectly to new residential construction." The discussion then keys this to household formation. (p. IV-10) The discussion concludes with a prediction of an 18 to 20 percent increase in demand per decade until the year 2000. This is an example of the failure of the discussion to take into account adequately population trends and the economic factors bringing an end to urban sprawl construction. It would seem that the projection is highly inflated. Also the EPFF fails to address the possibility that the demand for wood products may decline in the future while the demand for services such as recreation and esthetic demand is needed before a new Forest Management System can be devised.

The report gives the impression that all timber products are used for valuable, vital human needs such as housing. This is not the case. When the price of wood is low, forest products are used for less valuable purposes and are discarded more readily than when prices are higher. For example, the quantities of recycled paper which are available are extremely sensitive to the price of competing paper stocks.

On page IV-3 there is a reference to the demands on forest products created by "new life-styles." Those appetites are not new, they have been developing since World War I. The new life-styles, according to recent surveys, are less demanding. On the same page under "price changes" the draft says, "Patterns of use were influenced by cheap energy, reasonably prices suburban land, relatively inexpensive food, and stable timber prices." I believe past timber prices should also be described as cheap. It is obvious that lumber prices have not reflected the true cost of forest production.

The term "sustained-yield" needs to be examined on ecological terms. In addition, the levels of activity seem to have been developed on the assumption that it will be desirable for us to maintain a continually expanding economy. From an ecological standpoint, is an expanding economy really desirable?

Perhaps it might be useful to compute the total number of acres required by the average American for wood products, recreation etc., we might be better equipped to determine the future demands of America's forests.

Future needs cannot be met by private enterprise alone.

It's not clear to me why high competition would not keep down prices rather than raise them.

This business of converting old growth timber is certainly not merely a question of aesthetics. It strongly involves economic stability and future supply on a regional basis.

Timber utilization does not receive adequate treatment. Data should be supplied to evaluate whether or not improved wood technology such as oriented fiber chip boards now being developed with United States Forest Service funding can supply all presumed increased needs through better wood utilization.

VII-29, Timber Resource System, 1st paragraph. In view of what has happened to world commodity prices in general in the past few years, an increase of 60 percent in the price of lumber over the next 25 years seems modest indeed. The case made here for increasing timber growth is complex and confusing. It needs to be strengthened.

VII-5, Timber Activities, last sentence. Change to read: "Additional research at the high supply level will provide more efficient treatment to increase the likelihood that a higher proportion of all forest and related resource needs will be met."

IV-12, Timber and other commodity indexes. You should state what relative price trend assumptions are assumed in Table IV-3. Also, what happens if timber and energy experience relative price increases?

The values of national forests for uses other than timber production have been growing tremendously in the decades following World War II. These values, I feel, in many ways now outweigh the value of National Forest as a timber resources. Perhaps limiting the supply of timber from the National Forests will promote technological advances in substitutes and alternatives to using wood.

Perhaps self-sufficiency in timber resources should be looked at more carefully as a national goal, including export and import levels of wood products.

The Plan should recognize the effect, even as an indicator, of the stability of the national building industry on the level of forest practices on private lands. The result of having predictable prices in the industry could stimulate investment on private forest lands and would deter premature harvesting during periodic peak prices.

Alternatives should evaluate and include the effect of any current State forest practices acts--especially in the reforestation realm. The accomplishment level will be affected by the presence or absence of State regulation.

It appears that the high supply alternative only assumes that increased timber cutting will be accomplished by increased road construction which will have an adverse effect on soil, water, wildlife and fish habitat. I feel that under the high supply we should go to more sophisticated aerial system that will decrease the impact on areas that are not roaded.

Neither the amount of timber harvested nor the consequent road network is any index of anything relating to land capability--and this is where the failure of the whole direction of the plan lies. Rather than considering what the land base can be expected to produce the whole plan is predicated upon a top and extraction basis with trade off values of the Multiple Uses weighted in favor of timber extraction with soil, recreation water quality on the short end for, make no mistake, present timber recovery methods are destructive to these values in spite of the contrived meteoric found in this draft.

EPFF states that, "The controversy over clearcutting stems primarily from its visual impact." This is untrue. I can think of at least a dozen reasons to oppose clearcutting in many areas of the Northwest, and they all outweigh the benefits of clearcutting.

The high levels of access roads construction, reforestation and thinning are absolute minimums if we are to provide for the Nation's wood needs for the future. Roads are multifunctional and provide access for all forest users, administrators and research people.

The plan contains many distortions, contradictions, and occasional misrepresentations of impacts. One example: "The controversy over clearcutting stems primarily from its visual impact..." (III-6). Even Chief McArdle once remarked, "Logging is a violent activity."

III-12. For several years log exports from Washington State have been excessive.

There is no recognition of the fact that in some areas there is already too great an allocation of the timber supply. The High Supply alternative appears to apply only to the timber resource since there is no recognition that as more and more areas are clearcut, there is a decrease in other "goods and services."

Effects on streamflow: There is a need for clarification of what the Forest Service regards as "normal logging." In southeast Alaska fisheries biologists regard Forest Service research that has been used to justify present programs as incomplete and inconclusive.

Effects on Soil and Water Chemistry: In the United States we have had too few years and too few successive crops of timber from the same land to justify sweeping conclusions. There are reports from Germany of difficulty with fourth generation spruce.

The second paragraph on page VII-16 does not necessarily correspond to actual practices presently employed. In the East clearcutting is widespread in places where it is not "essential" to accomplish the forest management objectives. This paragraph describes the ideal roal of clearcutting and makes it seem to be a limited method used only under certain conditions. This is not the way the National Forests and even research people have been behaving.

Page VII-23-only some kinds of timber harvesting increase diversity, honest groupælection can increase diversity profoundly. Light selection cutting will increase it much less and clearcutting tends to increase uniformity on the areas clear-cut.

The demands for "chemical wood" to produce glucose and energy are not mentioned. This demand will increase and impacts on wildlife and water will be immense.

Fear the increased pressure to increase timber harvest on U.S. Forest Service lands will (1) work to the detriment of other uses (above) and (2) cause long-term damage to the timber industry itself through jeopardizing true sustained yield of QUALITY stumpage.

Page III-11, 12. The holding back of harvesting in old-growth stands to accomplish even-flow sustained yield has adverse implications for the future. Most authorities see a timber shortage developing within 15 to 20 years that will intensify with time.

I strongly urge you to continue to support all appropriate forms of silvicultural techniques including clearcutting. So I am in favor of the statement on Timber Activities.

The impression is given that timber and environmental values are an either-or sitiation. This is not so, not usually. Greater stress should be placed on showing they are not mutually exclusive.

On the matter of timber yield, I do consider this the major responsibility of the NFS and do not wish to deny the importance of this role on the well being of America. I believe sales and resulting yield should be geared to national domestic needs. Export of timber products from Federal land is inexcusable. National Forests should be managed as a resource for future Americans, not as property for private industry.

With current timber growth expressed as a percent of the potential, the National Forest System is the lowest category of all the other types of ownerships. Thus, the Forest Service should be concentrating all of its efforts on the National Forests and let the small woodland owners, who are doing a substantially better job, manage their own timber.

The plan addresses itself somewhat to the controversy which surrounds the conversion of old growth stands in the Western United States. There are several justifications given for the current Forest Service program which draws out the conversion period for the old growth. Those given are:

Speculation on the possibility that harvest with technical assistance could result in greater impacts on water yield and quality than harvest without technical assistance is unworthy of consideration. On the contrary, technical assistance should improve the quality of layout and planning of harvest operations and hence reduce these impacts.

Triple or quadruple a program to revise the attitudes of people against timber harvesting.

I am particularly concerned about the destruction of litter, which is, in my view, one of the most important forest products. This means that we need a more critical evaluation of burning. The organic materials produced by photosynthesis and stored in litter should be reincorporated into the forest system by mycorrhiza. Retaining of litter decreases erosion, it preserves minerals, it protects surface roots and feeds the root system of the surrounding trees. This, I believe that especially an investigation of litter production and litter utilization can be of great importance in forest management.

Even at the high supply alternative which we have selected, the expected harvest levels are grossly inadequate as the "target" contribution to national needs from the national forests which hold 52 percent of the softwood sawtimber inventory of this Nation.

Page V-6. "The wildlife and fish habitat system" for the TM program should read, "Design of Tm projects to enhance or protect key wildlife and fish values." In no way will each TM project enhance these values, in fact, except where they have been identified as key, I doubt if they'll be protected at the present level.

To maintain the stability of local economics by preventing rapid industrial buildup and later retrenchment, 2) to avoid a period of intensive road development to create access and finally 3) to minimize esthetic disturbances of forest landscapes. I find it difficult to comprehend how the Forest Service could justify the tremendous loss of a very valuable natural resource through mortality in these old growth stands with these three justifications. Your management here is really no management at all.

No increase in timber yield. No clear cutting in National Forests.

Emphasize nontimber resource in use in determining timber access routes.

The role of timber prices in housing costs seems exaggerated.

We question the lack of mention on recovering mortality in the western forests as a means to better utilization.

RESOURCE - Recreation and Wilderness System

Most Forest Service recreation facilities now in existence should be replaced. They have been neglected for so long there is little to salvage.

Emphasis should be placed on minimal development recreation sites limited to toilet facilities and table-bench, fire pit campsites.

Federal recreational facilities are poor in comparison with state facilities in the West.

The National Forest System should primarily provide simple picnic areas and campgrounds...(developments) should be only provided to protect the land and water resource, not for the comfort of the user...Wildernesses should receive increased allocations to allow managers to identify problems of overuse and enforce the procedures necessary to overcome these problems.

High standards normally associated with developed recreation sites are too expensive.

In the East where forest resources are limited and the potential for local accommodation is good, we see little need for forest land to be used to provide free lodging for all.

Locate future recreation sites and development in low productive site areas. Begin plans to remove existing recreation sites and developments from medium to high timber production areas.

Providing more primitive campgrounds will allow more people to find out and appreciate what a forest really is firsthand.

By developing campgrounds and marinas, more people are encouraged to use an area; and in so doing the value of the watershed declines, animal habitat is reduced, fighting pressure is increased, and some big game is driven out.

X X The Forest Service must continue to expand the facilities and opportunities for all types of recreation, from developed to primitive. However, highly developed, giant campgrounds having all the modern conveniences probably aren't compatible with the sylvan environment or the Forest Service mission.

X X First priorities for developed recreation should go to areas near urban population centers.

X X This is the Forest Service, not the Park Service. Keep highly developed sites to a minimum. Provide money to hire people and maintain areas to the standards to which they were constructed. (YCC's are not the answer.) Provide more VIS money to educate the public about their multi-use forests; encourage Wild and Scenic River designations and protect historical and archeological sites.

Without giving some indication of the management unit or composite size and the number of sites involved, the reader cannot determine how intensive or extensive recreational activity will be.

Campgrounds and picnic sites provided by the Forest Service should be relatively minimal in services provided, leaving better equipped localities for private enterprise to offer.

Care must be exercised to avoid overdevelopment and commercialization. Also, roads (campgrounds, etc.) in critical ecosystems need to be avoided.

X X Increased management for dispersed recreation and rehabilitation of existing areas should be given highest priority within this system. Especially in the East, the natural environment for hiking, hunting, fishing, and picnicking is what is going to be in short supply, and the National Forest will be about all that is left to provide this type of recreation experience. Lesser emphasis should be placed on large developed areas and VIS centers, which are an extravagant burden to the taxpayer. We should quit trying to create more recreation demand on the Forests by continued construction of impoundments and high density complexes. Leave this to the states, Park Service, and private enterprise.

Our only point of caution is directed toward the more developed campsites (those with electric and sewage hookups); where possible, they should be left up to private developments.

X X I do not believe in the government building or maintaining bedroom campgrounds along major highways. Leave this to private developers or concessionaires.

The Forest Service should deemphasize developed recreation and encourage the private sector to provide such facilities. The National Forests should provide minimal development facilities of rustic design which are tied closely to natural history interpretation and education.

Drive-in campsites should be provided by private enterprise rather than the Forest Service, in most cases.

Strict controls on pollution through mining and overgrazing. Recreation facilities should be restricted to minimum needs, namely - toilets, drinking water, and not much else. We should discourage the demands of "homes on wheels." Minimize the building of new roads.

Very much against "other developed recreation" in a National Forest. It should be like a proposal for creating new "playgrounds" for the public which is not, and should never be, the purpose of National Forests.

All sites including wilderness and campsites should have sanitation and clean-up facilities.

X X I cannot buy (in a far thinking plan such as this) that no additional recreation site will be considered in all alternatives. There are suitable sites for such use. We should give the public a chance to express

their preference and also tell them what the trade-offs would be.

Minimum development needed in high use areas of wilderness to protect resource - sanitary facilities the most urgent requirement - campsites should be designated campsites on spur trails off main trail when possible.

Consideration should be given to the full development of present Forest Service recreational sites rather than proliferating other areas without sufficient funds for full development and operation.

Develop walk-in camping, picnic trail-head facilities and expanded nature trails, with hostelling and mass transit perspectives.

More campsites needed, but prices per night should not exceed \$1. No need for fancy visitor centers or other structural developments. Stress sanitation and cleanup. Provide water supplies for recreation vehicles so water systems can be filled. Increase trails. Keep forests semi-primitive. Let the fancy dude stay in a commercial camp.

I likewise feel that the Forest Service should stop development of improved campgrounds with showers, trailer and camper hook-ups.

As soon as the crisis is over, activity should be raised to the moderate supply level as regards: 1) rehabilitation, 2) maintenance, 3) interpretive and orientation services; and we would suggest the addition of environmental education.

Two types of uses will have to be designated and separated. High density and impact use on lands peripheral to major parks and wilderness areas, and low density and low impact uses as core areas.

X X Support system except for recreation campground development and roads. This section should address itself to the need for full funding for operation and maintenance of existing facilities.

X X Emphasis should be away from the large complexes such as Flaming Gorge and toward many small units along streams, etc.

X X Favor less emphasis on new construction, site development, interpretation and road construction, and more emphasis on rehabilitation and maintenance of existing facilities, back-country use, trail construction and technical assistance to the private sector.

X X More development of moderate to low level sites will provide opportunity for pseudo wilderness which will supply the bulk of the need for the majority of the people. Now too few sites are forced to absorb too much use. Higher standards of construction and development to reduce long term maintenance costs are necessary.

X X The Forest Service recreation facilities I've been in the last few years are a disgrace. If we are going to be in it, let's do it in a manner that we can be proud of.

X X We need to put our efforts into rehabilitating and improving existing sites instead of building new units with added capacity of 15,000 people as stated in number one under low.

X X Give high priority to activities that require low energy outputs such as hiking trails. Put new developments near large population centers. Discourage ORV use. Give priority to rehabilitation of existing sites rather than construction of new sites.

X X In my opinion, new high use developments should come only at this level and only after facilities are properly maintained and dispersed recreation opportunities are more fully developed.

I am not sure how much confidence I have in the Forest Service for planning and protecting the environment. Too many roads, too many ski areas, too much commercial development can destroy the forest and the environment very quickly.

X X Without knowledge of where developed recreation will be located, I favor less development. How would goal of wilderness preservation be achieved by study of area?

Development of campsites should be one of the lowest priorities, as should be the construction of roads, since most campers are capable of utilizing unimproved areas.

X X A recreation site can do more permanent damage to a forest ecosystem than a timber sale.

X X Emphasis should be on recreation sites. Not for a wilderness experience, but for a family-type recreation visit in the forest.

Design new campground facilities for the motor home, camper-trailer, and self-contained camper. When possible, limit use of the older facilities to the tent camper. Acquire additional road right-of-way to improve limited access to National Forest lands. Limit off-road vehicle use to designated areas.

The public needs much more education on the use of the forests and how to enjoy them without too much "modern improvements." Many people enjoy camping and walking in the woods who are not able to go into wilderness areas, but who do want to get away from TV, gasoline fumes, etc. I would suggest three categories: 1) The wilderness areas for those physically able and knowledgeable enough to use it. 2) Camping areas with access roads and restrooms for those who want real camping and yet cannot attempt the wilderness camping. 3) An area for campers, trailers, mobile homes, snowmobiles, motor bokes, 4-wheel drives, etc., with concrete and asphalt roads.

X X New and larger recreation areas should be planned in those National Forests close to large population centers and less emphasis put on developing large recreation areas far from such centers. Recreation

should be emphasized in areas not having the climate for high timber production (central and south Rockies), but certainly in the PNW and SE U.S.; Timber Management should have priority over recreation spending. All wildernesses should be confined to high elevation sites where timber productivity is low.

- X Recreation and Wilderness System. We believe there is too much emphasis on increased recreation development on National Forest lands, when our direction is toward more private development. Also, there is too much emphasis on road construction as compared to trail construction.
- X Let's not open the National Forests to massive trailer camping, amusement parks, concessions and similar programs; privately owned land is already sufficient and often in excess.
- X I'm for increased emphasis on dispersed recreation opportunities, on good trail maintenance, on tough policing of ORV's, on Wilderness, and on proper landscape design being a part of resource management. I can't support any increase in the expensive VIS programs, concentrated campgrounds, etc., but we need better management and policing of those concentrated use areas that already exist.
- X Present maintenance programs are based on heavy use of "free" cooperative manpower programs, such as Mainstream and Neighborhood Youth Corps. This approach is fraught with fiscal disaster. Elimination or redirection of these programs into other agencies would leave the Forest Service with no budget and manpower capabilities to respond to the public demand for use of existing facilities.
- X Chapter VII, page 25. In second paragraph under "Effects on Wilderness and Recreation, "the statement" at the low supply level, cleanup and sanitation at developed recreation sites would be maintained at a satisfactory level" can be questioned. Here in the Southwestern Region we are finding it necessary to close some campgrounds for part of each year because we do not have the money to clean and service them. It is suggested that this sentence read: "at the low supply level, cleanup and sanitation at designated recreation areas cannot be maintained at a level adequate to meet current public use of these facilities."

Seems to be a need for more camp and picnic area capacity (PAOT).

Extremely desirable to alternate federal lands to park status prior to excessive industrial development. Suggest suppressing road construction as recreational access; i.e., parks, river float, etc., is becoming more prominent. Existing camping facilities may be more extensively utilized by scheduling visitations.

Control the number of campers in order to protect these overused areas.

Limiting the number of people in an area should be part of any plan.

Since you give no figures for the current inventory and PAOT of campgrounds, picnic grounds, visitor centers, roads and trails, it is rather

hard to evaluate the scale at which you propose to expand facilities.

Develop recreation sites with a people-at-one-time capacity of 351,000 instead of 15,000. Halt any further single use land use classification such as wilderness areas, Wild and Scenic Rivers, in favor of multiple-use classifications.

X X Increase those elements that will increase moderate level to 260,000,000 visitor days of use, but with support activities, etc., provided by private sector.

X X It does seem that visitor-days use would be more strongly affected by socio-economic factors in society than by system inputs. Development of new sites should be second in priority to rehabilitation of existing sites.

There should be more local and regional recreation areas near major population areas.

X X Need for development and management of the recreation resource is a must. Uncontrolled people are a bigger cause of resource damage than any other means. In certain sectors people attractions (lakes) are in places with no facilities to handle the people. These are needed.

Indicator figures (such as a PAOT capacity at recreation sites of 15,000) are difficult to place in perspective when projected demand levels have not yet been established up to this point (p. VI-15).

You fail to mention how the demand for recreation days can be controlled, yet you show definite limits.

Believe in banning all off-road motor vehicles except for safety and/or rescue purposes.

Stop encouraging destructive recreation use in the National Forests. Get off-road vehicles out of the forests; they have no place there. Maintain present car camps but do not build new ones. Throw out your socialists' findings about camping patterns. Limit the use of wilderness so that it is not trampled to death. Provide many, many more wilderness areas. Open up the old trails through the clearcuts so that people do not have to go to wilderness areas just to hike on a trail. To hell with recreation roads; they just encourage people to burn gas. Build bike paths instead, wherever possible, as in the Columbia Gorge or across Stevens Pass. Use imagination instead of asking for lots of money.

While I am all for additional trail construction, and especially for additional wilderness, I am totally against the off-road vehicles part and think that this type of recreation should be discouraged.

A much stronger policy of zoning for off-road vehicles is needed. All areas not specifically designated for this use should be closed.

Consider adoption of very strict controls and limits to off-road vehicles are absolute essential.

People at one time in the same location? Somehow we must control the type of access around campsites so that off-the-road vehicles do not damage vegetation and cause erosion of paths.

Off-road vehicles are particularly damaging to the landscape and in their destructiveness are denying an ethic of respect we owe nature and the future generations.

The program does not take into account costs involved in administration of ORV restrictions as a result of executive order and land use planning.

Much more intense regulation of ORV's, particularly trail bikes and snowmobiles is essential to the continuing enjoyment of recreational resources by the majority of National Forest recreation users. Regulation of horse packers is lax, particularly in requiring the packing out of trash and observation of grazing regulations.

We also question the Forest Service's responsibility to try and meet ORV's needs. Should not this be one of the first areas of high energy demand - fossil fuel demand cutbacks?

X Was dismayed on the lack of attention to the off-road use situation. I, as an owner of 6 ORV's, am appalled at the negative attitude of line officers in the Forest Service towards ORV use.

A major problem here will be controlling off-road vehicle use from roads leading to wilderness areas. To control this, off-road vehicles should be restricted to those roads posted open only.

X Pay attention to demand for ORV facilities.

Would like to suggest separate recreation areas for those who use motor vehicles and those who truly want an outdoor experience without gasoline fumes and noise.

Although some recreation and wilderness areas are already overused, I believe a permit system could restrict such use.

The recreation program should then be aimed at greater dispersal of users through better access on these lands where such use is compatible with other uses.

The total land involved in the park and recreational system should be increased and the number of people using them decreased.

X X Controlled use is the only way we can prevent gradual destruction of the wilderness.

X X Page IV-8, line 2. "A rate that cannot be sustained for long" is not necessarily true. We can have lots of wilderness not intensively managed for people distribution, or we can have a smaller system with intensive management. The present 15mm acre system (including the PA's) could handle 15,000,000 visitor days if they were perfectly distributed one visitor per 200 acres at a time over a 100 day season.

Move slowly in VIS area.

X X You use "visitor days" in millions as an "indicator output" to this your objective in our wilderness? Can we really afford 470 interpretative sites?

X X There is a great need to provide better communication with the public through VIS and I&E efforts. The public wants to know what is happening with natural resource management.

One of the most important jobs of the Forest Service in respect to recreation is the education of the recreationist.

We like your continued interpretive work through our Women's organizations.

Unfortunately, interpretative and orientation programs have been directed too much toward selling the public on Forest Service programs such as clearcutting.

Through a high supply alternative then, one would hope that more visitor centers would be made available and that the existing ones would be better equipped.

More education or something is needed to teach new people in the back-country and wilderness about fire.

More emphasis should be put on educating users how to reduce their impact on the land. The educational approach rather than the regulatory approach should be taken in trying to solve the problem of overuse. Increased effort to disperse recreational sites and their use should be made. Emphasis should be put on non-motorized forms of recreation. The National Forests provide unique opportunities for non-motorized recreation; whereas motorized recreational needs can be met outside National Forests. More roads should be closed to increase the quality of dispersed recreation. It has values other than recreational potential. Technical assistance to landowners for trails and park establishment should be a criteria of Forest Service recreational management.

Resent the arbitrary actions of the rangers in destroying historic old mining and milling buildings.

Program does not discuss various inventories needed in archeological, historical, geological, etc., sense.

X X Conduct surveys during the early planning stages for all land disturbing projects to establish the presence or absence of cultural history values.

I would urge adding with high priority remaining samples of different types of terrain in their natural condition before the intrusion of technological man.

Additional unique areas will be identified and the number of unique areas increased. Usage will be restricted for their own protection.

Is it to be assumed that cultural and paleontological values will be included in the protection of landscape values? Management of such values, while not always mutually exclusive, cannot be related totally to the "research" category.

The most misleading portion of the EPFF as regards wilderness is the statement that the low supply alternative "would in effect reduce the proportion of goods, services, and amenities provided by Forest Service programs." This is an extremely misguided and inaccurate statement. Of the three alternatives offered, the low supply alternative would offer the maximum solitude-wilderness benefits, the maximum aesthetic benefit, the maximum supply of undegraded water, the maximum wildlife habitat for many species, and the maximum opportunity potential for scientific understanding of relatively undisturbed ecosystems. The document does not reflect understanding of the simple fact that substantial development programs have a detrimental effect on many values which should be given equal consideration under the terms of the Multiple Use-Sustained Yield Act. We are hopeful that the treatment of wilderness will receive their impetus from the EPFF.

Seems to me the most pressing problems the Forest Service faces is wilderness. This is also a problem of trusteeship of priceless natural areas of our country. Wilderness use could be managed very effectively, without a mandatory permit system by 1) eliminating or curtailing horse use, 2) eliminating fish stocking, 3) not winter feeding excess elk populations, 4) encouraging predator populations and in general doing everything possible to build up the diversity of animal populations without at the same time building up excess populations of species which "need to be hunted", 5) no wood fires, 6) limiting party size (but not allowing more horses than people in a party, 7) no new trail construction, 8) moving boundaries of motorized transport outward from the wilderness boundary, 9) encouraging winter use as an alternative to summer use.

Some comments heard in recent years would have us believe that the future of this great country rests on wilderness and on other outdoor recreation facilities that "The American Public demands." Not so, not so. I don't mean to imply by this that the intangible assets of our forest resources should be disregarded in our management efforts, but let's not put the cart before the horse. (See page VIII-1, of the draft, bottom paragraph.)

In the section on "the industrial era" (III-3) we find that recreation use on the forests has increased more (900%) than any other use, but nowhere do we find a mention of the decrease in wilderness, de facto and designated, which has occurred in the same time frame nor do we see a

clear statement of the destruction of wilderness values which is planned by the Forest Service under any of the proposed management options.

Among other things, the wilderness system provides wildlife habitat and preserves watersheds. The system could better be measured in terms of acres rather than by visitors.

Wilderness does not belong here since it is not primarily a recreation resource and its value cannot be measured in visitor days or PAOT units. According to the low alternative, there would be no funds for wilderness study, but I don't believe it.

The Service must modify its standards for wilderness status in order to provide such lands in the east and nearer urban areas.

We are now getting to an age where backpacking into wilderness areas is difficult. We are not wealthy enough to stay in resorts, motels, hotels, or condominiums. We are just as much entitled to access to wilderness camping areas as the young who can hike in, or the affluent who can go in by pack train. This is public land - for all the public.

It is high time to call a halt to this "managed wilderness" - or I should say more correctly, "overmanaged wilderness." We don't ask or expect to be spoon-fed.

We fear a tendency to overdevelop wilderness systems here.

Little is accomplished if heavy use creates the very conditions in parks or wilderness that mimics the conditions people wish to escape.

Maintain out of the way places for hiking - keeping motorcycles and roads out of reasonably large areas. In future people will of necessity learn to use their feet more and will need that semi-wilderness area.

Meanwhile, it is also extremely important to preserve all wilderness that still exists, especially in the lower 48 states and Hawaii. Any in-roads to Alaska's great wilderness should be made with extreme caution and from a perspective of the uncautious past approaches in other areas.

Wilderness management seems to offer the most hope for survival of large diversified populations of wildlife and fish.

People on horses riding and camping within the backcountry have many times more impact on the backcountry environment than the same number of people on foot with packs on their backs.

In my opinion, a small area of strict wilderness area serves the same purpose that tremendous large areas.

Retain grazing allotments in wilderness areas.

Recreation and wilderness should not be lumped together; such an approach only causes confusion as to the multi-purpose benefits of wilderness.

More emphasis should be given to scientific, appreciative, and educational recreation use of the National Forests. Dispersed recreation should be emphasized over high density motorized activities!

Wilderness management tends to be the most economical form of managing land, and since any other action causes irreversible change, it seems long-term benefits of not developing areas outweigh long-term costs.

You stated that wilderness users have a higher average income than non-wilderness campers. This has been disapproved by Stankey (1971).

On pages IV-6 and IV-8 wilderness use is indicated as having only increased 80 % during the last decade. This certainly is an understatement. Various forests have already turned to rationing wilderness use. Wilderness use has increased so fast that the resource is being threatened in many ways.

This increased use is not just due to demographic and economic reasons. Forest Service policy has and will continue to contribute to this situation as more and more "de facto" wilderness is developed for timber, wilderness use is concentrated more and more on the "official" wilderness.

Wilderness and recreation are not the same thing. The EPFF should not place them into the same category. Wilderness should be fined in non-recreational terms and defined as a separate resource. Recreation is only one of many uses of the wilderness. It has historical and scientific value as the last ecological "frontier"; it has value as an important source of water, wildlife, and weather.

XX Wilderness system should not be perverted by making substandard units into wildernesses.

The Wilderness Act is the legislative travesty of the century; a disgusting act of political compromise that barely recognizes physical realities while bending over backward to appease environmental reactionism compounded by urban ignorance.

Wilderness areas in Alaska may have to be treated differently because of the problem of access to the sites.

In answer to a question near the top of page III-9, the Forest Service should provide a broad spectrum of recreation opportunities, but there should be no overemphasis on either end of the spectrum. The admittance of people into wilderness for recreation should be very carefully controlled, individual areas being restricted to visitors or closed as necessary to prevent damage. At the other end of the spectrum,

the National Forests should not be overloaded with constructed facilities.

The reference to 80% increase in wilderness travel is misleading. When you add to a small base to start with, you mathematically come up with a large percentage increase. Presentation of the data in absolute numbers will show where the majority of the public obtain their recreation in the National Forest. The whole issue of wilderness has been blown out of proportion as to what the American public is really demonstrating in the way of recreation seekers.

United States Forest Service should pay great attention to maintaining semi-wild areas in all forests, especially those near people.

The preoccupation with wilderness barely seems justified. Why is this section titled Recreation and Wilderness if Wilderness is not a component of the recreation research and not a co-equal entity? Wilderness can only be justified as an adjunct of recreation research.

- X X An inventory of recreational and wilderness-like opportunities outside of legally designated wilderness should be made and published (especially valuable in the East). People often visit wilderness areas for reasons just as well served outside of the wilderness.
- X X Effort should be made to establish a different classification than wilderness. One that would allow for more use by people and not limit the use of mechanized equipment.
- X X The nation cannot afford to tie up any more additional areas in optical interest or single use classifications. We must have multiple use on virtually all areas if this nation is to survive.
- X X Man's need for wilderness is based on laboratory experiment and the expressed desires of a large number of people. The commodities foregone through large area wilderness set asides is too high a price to pay. All men need employment and the amenities the forest can supply may be able to survive and live a good life without wilderness.
- X X Why do we insist on keeping wilderness management (and even roadless study areas) as a poor step-child of recreation management? Why are Wild and Scenic River Studies under Watershed Management? Personnel in watershed have shown an obvious lack of interest and ability to handle this new concept. Wouldn't it be more consistent to a group wildernesses, roadless areas, Wild and Scenic Rivers, etc., as a separate but equal management branch?
- X X We often find that Forest Service personnel are the "purest" of all wilderness advocates. Let's find out what the people (all the people) really want before we proceed.

No additional sites for tourists; take care of the rivers, streams, open spaces, etc. In wilderness is the preservation of the world.

The miles and miles of abandoned telephone wire and insulators in wilderness areas are an unsightly reminder of man's presence and are dangerous to both man and animals.

Favor a high priority given to wilderness preservation but a lower priority for recreation development since extensive opportunities for recreation already exist outside of the National Forest lands.

Think much more should be done in wilderness management to make the wilderness of the future serve many more people than it does today.

We recommend going slow in designating additional wilderness areas so as to guarantee an abundance of food and energy supplies in future years.

Would like to see a better, more balanced mix of recreation and scenic opportunities. In my opinion, the allocation of lands to wilderness has been and continues to be lavishly out of balance.

- X Wilderness acreages need not be as great as some minorities propose. Recreation is often compatible with other uses.

The loss of timber in the wilderness system will always be an absolute loss above whatever level of forest management is practiced on the more intensive areas.

- X Use National Forests for Wilderness and day use. Let private sector develop the fancy facilities.

- X There are very strong indicators in Montana that there are strong anti-hunting forces generating behind the wilderness movement. Closure of hunting in wilderness areas in the Gallatin National Forest would be in effect a defacto extension of Yellowstone National Park boundaries.

- X Wilderness system needs to be expanded to double its present size with immediate emphasis for eastern wilderness. Present areas containing mining activities in a remote area or rugged areas to be logged by helicopters or cable could be included under a backcountry classification.

- X Page VI-15. Need to indicate what the intensity of wilderness management will be at various levels. If we don't have dollars for intensive management of people distribution, we'll need more wilderness acres to accommodate them.

How much wilderness is enough? How can the general public be shown the National Forest System's stand in comparison with the acreage being demanded by the bona fide environmentalists and the EEs (emotional environmentalists)? This would of course apply to mining interests and cattle interest, also water.

No support for the future importance of this resource to the mental and physical welfare of the citizens. It is given cursory, off-hand treatment which in turn gives glaring evidence to the Forest Service's reluctance to recognize the importance of the wilderness resource.

There is no real plan or philosophy for the wilderness resource.

X X Although Wilderness is not mentioned in the alternatives, we need to channel a substantial part of recreation money into upgrading our wildernesses. This includes removal of non-conforming structures, converting essential structures to blend better with the surroundings (for example, range improvements), bringing wilderness trails up to standards, etc.

X X People in the future will not be looking for the established areas, but will tend toward primitive recreation for solitude and open space.

Vigorous programs to combat litter and prevent abuse of recreation and wilderness areas should be initiated. Also, encourage even more wilderness areas to be studied and to be established so that people may enjoy this irretrievable resource. Development of recreation areas of maximum visual and ecological impact, such as camper campgrounds and lodge units, should be kept to an absolute minimum. Tent and open-air camping should be encouraged over car and ORV type camping. The number of visitors in a delicate area should be kept to a minimum and adverse impact should be avoided on all areas. A user fee should be reintroduced for both recreation area users and wilderness travelers.

Recreation in wilderness areas will be a great therapy as the stress and strain of civilization increases; and there are few such areas.

If the San Pedras Parks Wilderness is representative - then the Forest Service might as well abandon the entire wilderness system. Excessive livestock use has effectively eliminated the aura of wilderness. Erosion is rampant. The native flora is being destroyed. Competition with wildlife has effectively left wildlife out in the cold.

Several times in the EPFF document "vast wilderness tracts" are described. Where are they? They certainly are not in the National Forests. The wilderness tracts could be much larger if not for certain National Forest policies.

Unnecessary stress on natural areas has been their use by outward bound groups who could do their stuff just as well in less fragile terrain. Also, horse use without permits and heavy damage by horses in fragile upland meadow land.

More wilderness areas should be developed in the Eastern and Southern Regions with very stringent regulations on their use to prevent abuse. Increase in development may not come about if energy shortages or conservation measures keep visitor use down. A wait-and-see attitude should be adopted regarding this resource system.

The restriction on recreation in classified wilderness are contrary to the aims of the U.S. Ski Association. While we support the areas already established, we recommend that no new wilderness acreage be classified in the snow belt.

We strongly oppose any area, outside of a National Park, National Monument, or National game refuge being placed into Wilderness for all time to come!

A good example of the need for land-use-plan changes is the 1964 Wilderness Act which many of us endorsed a decade ago, and which we see today as an error in judgment.

Wilderness is a resource. It has scientific values; untouched, wilderness can be used to determine the health of land that has been modified by man. It has value as a gene pool. It has historical value because it is the last frontier. It has value as a sanctuary for wildlife species that are sensitive to human intrusion. Access to wilderness should be decreased to allow for better education and regulation of users and to improve the quality of experience.

The EPFF should describe clearly the distinctions between types of activities and facilities permitted in wilderness areas and primitive areas.

The EPFF is heavily biased against wilderness preservation. The primary reason for wilderness preservation is not for recreation.

After insisting correctly for many years that wilderness is not just a recreation area, the Forest Service here decides to measure wilderness output (value to society) solely in terms of visitor-days, just like any other recreation facility. We hope you will learn that the value of wilderness cannot be judged in such narrow terms.

The single proposal to minimize the effects of air pollution on recreation and wilderness lands would seem to be a very inadequate program for "reducing impacts of man's activities" in these areas.

There is a clear and pervasive tendency throughout the EPFF to slight wilderness values. This tendency even extends to the logo on the front of the publication which is a cleverly arranged block of words which identifies just about all the values and concepts which apply to our National Forests except one - wilderness.

On page VII-26, the draft says, "New dispersed recreation opportunities would help direct heavy-use pressures away from Wilderness." I might, just as defendably, say added development to provide dispersed recreation opportunities would drive more people into designated Wilderness Areas.

Primitive areas should be expanded, both for aesthetic value and the addition to wildlife habitat. Camping is getting too modernized. Wilderness is good for the modern citizen as it acts to fight anxiety.

Those activities related to extension of the Wilderness System should be carried out at the highest available level of funding. Site development and new road construction are counter-productive to more important objectives.

Wilderness respect is needed. Roads for vehicles, trails for walking. Keep greenbelts inviolate. Cycles should not be permitted off roads. Encourage more hiking on trails.

There is a clearly defined need of extensive recreational opportunity and a very wise preservation policy for wilderness areas and roadless areas not under the Wilderness Act.

We maintain the Trail Peak-Horseshoe Meadows Area should be declared "wilderness" for the protection of the resource for posterity.

Emphasis should be on dispersed rather than intensive recreation. Intensive recreational needs are better met on private property; dispersed recreational needs are difficult to meet except in the National Forests. Residence permits should not be increased, residences should be phased out gradually.

The Forest Service should initiate a program to inform people of the facilities and areas available to reduce perhaps the extreme pressure on the National Parks and Forest Service areas like the Boundary Canoe Waters.

Fire protection will be provided on an each event basis in wild and wilderness areas. Unobtrusive control will be carried on in other places.

More attention should be given scenic drives - many people drive through but do not camp out.

The Forest Service should provide more primitive-type camping facilities in National Forests.

Camping is changing. Those who seek primitive quiet camping will try to find such a spot, so often he must camp in an area not intended for that use. Needed are small, scattered less-developed campgrounds, especially in newly roaded river valleys and near streams.

There is too much emphasis on developed recreation. There is a great need to protect the natural unspoiled environment needed for high quality recreation whether it be fishing, hunting, back-packing or camping.

All new and rehabilitated facilities including roads and trails should be programmed so as to not attract more visitors, but rather to better manage and dispose present visitor level.

There is a basic need for primitive areas where no humans should be allowed entry.

People-pressure cannot be avoided, but careful construction of facilities, roads to campgrounds, etc., will lessen the impact on the environment.

XX I feel there is a real need for self-guiding trails (educational), undeveloped recreation sites, or minimum development.

More specifically, the draft is seriously at fault in lumping Recreation and Wilderness into a single system.

The amount or degree of development should decrease as one travels into the forest, especially toward a backcountry or wilderness.

XX Wildernesses are not used by the majority, but campgrounds are.

XX Wilderness permit system is needed and requires funding.

XX Forest Service emphasis should be on dispersed recreation and trail construction.

More dispersed campgrounds in the West.

The National Wilderness Preservation System should be completed as quickly as possible. This would not only allow a wider choice of lands suitable for wilderness to be considered for inclusion in the system than if some lands are given over to other uses, and in addition rapid completion of the Wilderness System would allow the Forest Service to begin managing non-selected areas for other purposes at an early date. I do realize, however, that in the consideration of wilderness, the Forest Service is acting more rapidly than Congress.

XX Why after ten years since passage of the Wilderness Act has the Forest Service not completed its studies? If funds for forest roads could be made, why could not these studies have been completed?

Much additional land should be set aside - perhaps doubling the present amount of designated wilderness in the National Forests.

The most important thing the Forest Service should do is to increase areas designated as "wilderness" by 200 percent. At the same time, access to these areas should be severely restricted.

If we are going to save the beautiful parks and wildernesses for future generations then we are going to have to have a lot more of these areas or else the ones we have known are going to be trampled.

Omit all studies for additions to the wilderness preservation system except that required by the Wilderness Act.

Much land now ineligible for wilderness protection could be made eligible by the removal of man-made structures.

The new wilderness study areas and the eastern study areas should be included in the Wilderness System as soon as possible.

Think most of the wilderness increase should be in the East and mid-West where the most number of people are.

Large stands of virgin forests should receive some consideration for inclusion into wilderness so that we may know and could see a 200 or 1000 or whatever year forest.

Expand the wilderness system to the maximum extent possible as our legacy to future generations.

Each of the roadless to near roadless areas must be studied, then presented to the public in an EIS. Probably the great majority of 60-100 million acres of National Forest qualify.

In Alaska only 2.5 out of 18 million roadless acres are considered for wilderness. Admiralty Island in Alaska is scheduled for extensive multiple use without any consideration on its wilderness resources.

Already enough wilderness areas in Alaska. Multiple land use makes more sense.

Study of wilderness areas should be confined to those areas located within high alpine zones presently designated as primitive areas. Areas such as Snowy Mountain do not fit this description.

Every effort should be made to study the selected wilderness study areas as fast as possible so that those not selected for wilderness could be returned to multiple use management.

Halt any further single use land use classification. Such as - wilderness areas, wild and scenic rivers, etc., in favor of multiple use classification.

I feel we have adequate wilderness areas and the money could be put to better use in multiple-use programs.

Unfortunately, Forest Service personnel appear to be unduly influenced by irresponsible citizens in making decisions as to the amount of recreation and wilderness resources. Rather than identifying all areas within the U.S. which could be candidates for wilderness, I recommend an identification of the wilderness needs for the nation. Once this identification is made, then the highest and best acreage suited for wilderness can be so classified.

Let's study our potential wilderness sites and get that issue resolved. Priorities should be given to the intensive use of areas (campgrounds, etc.) rather than large area - low number of uses types such as back

country. The loudest voice is getting the attention and this is not necessarily where the dollars should be spent.

- X Let's complete the studies of potential wilderness, select the best potential areas (not to exceed 10 percent of the total National Forest area) and get on with managing the rest of the land for commodities and high demand uses. We have already listened and sat on the fence far too long because of a vociferous minority that will never be satisfied with the percent devoted to wilderness and "unspoiled" solitude.
- X X Wilderness classification should be carefully weighed against other needs and demands on the forests.
- X X Very important to keep faith on wilderness study as committed in final EIS on roadless and undeveloped areas.
- X Low: none of the "new study areas" would be studied? Hard to believe. Absolutely no trail construction - also hard to believe it rates such a low priority.

Your alternatives make a mockery toward the Roadless Area Review and Evaluation; to the Wilderness Act; and to the National Environmental Policy Act of 1969. Your high alternative to "study 2.4 million acres from the Final New Study Area List for Classification as Wilderness" is a dismal and token consideration for the recommendations (of 12,289,000 acres in 274 areas) of the Roadless Area Review and Evaluation.

- X X Many "wilderness" advocates really want roadless areas; they are willing to have shelters, tables, etc., but no roads.

In spite of establishing a system of Wilderness Study Areas, we find that the Forest Service by overly strict interpretation of the Wilderness Act is discouraging the creation of Wilderness Areas.

The inadequacies of the Roadless Area review should be obvious by now, and the need for an expanded system of wilderness study areas should be recognized. Many additional areas have been proposed by conservation groups throughout the United States. These need to be recognized and be given protection and study along with those proposed by the Forest Service.

The 274 areas (12.3 million acres) on the Chief's final list should be studied within the next 10 years for possible inclusion in the National Wilderness System.

Be more open minded on wilderness potential. Untrammelled means nature returning or functioning as a natural state. It does not mean untrampled as 99 percent of the people believe.

There should be no differences between the options in the studies of defacto wilderness - Forest Unit Plans had better consider wilderness as an option.

Wilderness is a costly luxury which America cannot afford in 1975.

Roadless areas which have not been studied for their suitability for wilderness should be withdrawn from the allowable cut base.

It should discuss in detail the types of studies being done on primitive areas and new study areas, the steps which must be taken to classify such lands as wilderness, the type of activities and facilities permitted in such areas during the study period, and whether such activities are potentially inconsistent with designation of such areas as wilderness. The Forest Service's policies for management of wilderness, particularly policies relating to fire management and prevention of excessive use, should be described.

Page III-6, the question, "How much federal land should be designated wilderness?", is asked and the next sentence recognizes that wilderness use of public land is important. Perhaps we should ask, "How much wilderness is there on public lands? What are the benefits of wildernesses?" When we recognize wilderness as a "resource" rather than a "use", we will be able to determine how much.

We strongly oppose the disproportionate amount of federally controlled lands that is being classified as wilderness.

The setting aside of large wilderness areas represents a tremendous cost to the public, and affords a recreation experience which can be primarily enjoyed by the affluent sector of the populace.

Instead of more road developments of Forest Service should study more areas for special designation or classification. Instead of just wilderness why not some U-3?

Why is "study 2.4 million acres from the final new study area list for classification as wilderness" only mentioned in the high supply alternative?

Effort in the area of wilderness resource protection is an investment in the future, and a wise one indeed. It is not really an irreversible decision and can be changed in the future if needs be.

Protection of wilderness and roadless areas are of prime concern to me. Once a road is built, it is not easy to return things to an untouched state.

Expansion of National Wild and Scenic Rivers is a must if only to assist in the matter of water pollution, but by so doing, beauty can also be preserved. The National Trails System is excellent - providing we can somehow limit the usage by heedless people. National Forest System should obtain and retain management of areas allocated to Wild and Scenic Rivers and the trails - these areas should not be given over to local authorities; however, such authorities should be included in the planning for maintenance.

To be commended for your foresight in not compromising the possibility of wilderness classification and expansion of Wild and Scenic Rivers.

Reference to the wild and scenic river program is limited to only a brief mention of studies on A-14; this should be expanded to include objectives of the program.

Primitive areas and National Wild and Scenic River Systems, in some cases, interfere with uses and developments that are helpful to local and national economy.

Do not expand the Wild Scenic and Recreation Rivers System.

Suggest the Forest Service build a good surface road from Waterton at the entrance to Platte Canyon directly south on top of the ridge divided between the Platte.

The directive to initiate road construction for up to 2,000 miles of access roads to wilderness and dispersed recreation areas is totally unacceptable.

Do not need additional Road and Trail construction for dispersed recreation use until we can take care of the presently assessable areas.

While opening up more area to recreation use does in a sense reduce the pressure on those areas already roaded, it also reduces the amount of area available where there aren't roads, where it is possible to get away from people and cars.

If auto travel is 23 percent of recreation use, what about general road improvement? Program does not discuss roads except in relation to timber.

Constructing roads to wilderness areas is self-defeating. Those who want to experience wilderness are ready to backpack to it for the very reason he seeks wilderness.

Closing all but a few roads in Jemez Mountains - Santa Fe National Forest in New Mexico - will leave huge areas (the most beautiful and most scenic) unavailable to the average citizen, and this is a crying shame.

Old logging roads can allow quick access to forest fires and the benefits obtained from their presence far outweighs the small increase in additional wilderness area created if the roads are made inaccessible.

The Forest Service lands are overroded at present. Any plan which calls for hundreds of miles of additional roads is not acceptable.

Roads should not be built to wilderness areas. As timber access roads approach wilderness areas, they could be used, but to build roads to the edge of a wilderness area is destroying the wilderness concept.

Too many people and too many roads can very quickly destroy an area for all of us.

X X Either under L&W system or under Recreation-Wilderness System there should be a specification as to the miles of access on existing roads and trails. Construction for recreation access is in the R&W system, but it is not the same thing as the direct acquisition on existing access routes to National Forest lands. The need for such access to National Forest lands has increased dramatically...but it is not getting the attention it deserves in the EPFF.

X X No indication of how recreation will pay its share of road construction and maintenance. Other areas are carrying most roads.

X X Considering the future for individual motor transport due to dwindling oil reserves, should mass transit for recreation be considered?

X X I find the terms "road and trail construction and reconstruction" vague. Mileage for each should be separated and listed. For instance, 6,100 miles of trail construction or reconstruction doesn't really tell me how much of each could be expected. We seem to have too many miles of trails and roads already present that we never have money to maintain without adding more.

With regard to ROADS in that area, the Trail Peak-Horseshoe Meadow road should not be extended one inch.

Although "roads can provide easier access to new desirable vistas", they also can destroy the need and purpose of going to the vistas.

Road construction should be minimized; road reconstruction to reduce stream and wildlife habitat impact emphasized.

In a technological, largely urban age, development of access to recreational areas is very important, as is the ultimate wilderness area designation scheme. All areas show strong potential for new job opportunities for unemployed and underemployed.

Close many needless and unused roads into forest areas - but replace many of them with trail systems, marked so that usable by beginners and all alike.

We need fewer roads and an expanded program of trail building, rehabilitation, or reconstruction and maintenance.

As presented, the alternatives combine undesirable actions, such as generally increased road building and logging on our already overcut National Forests, with desirable actions such as increased technical assistance for private forest owners. In the HIGH recreation alternative, if we want 6,000 miles of trails we have to swallow 2,000 miles of "recreation roads" as well. This lumping together of desirable and undesirable features makes the choice among alternatives a pretty meaningless exercise.

If the rationale on Transportation and Access (pages 34-37) in the Summary Highlights is an indicator of the Forest Service's approach to an Environmental Program for the Future, the future is bleak.

Trails are best built to low standards if designed primarily for hikers use. I oppose building high-cost horse trails in wilderness areas.

Needed are cross-country ski areas and well defined but limited off-road vehicle areas.

Place national trails system in low timber production areas except as needed to acquaint people with benefits of intensive management.

Need better trail maintenance. Need to open up old trails. Need to open up campgrounds not being used.

Need trails at low elevation - new trails and need more low elevation campgrounds.

The construction of trails for foot use is much easier than those intended for horses; and further, horses should have more restrictions placed on them, in particular, they are not compatible with wilderness, particularly in high use areas where horses place a much greater strain on the land than people.

Continue with the "muscle-power" trails already well under way. Waterways, either by small boats with motors or canoes - some of which are in existence. Trails, that are unpaved and rustic, that may be traveled by a 4-wheel drive, motorcycle, or dunebuggy.

All trails should have multiple use consideration; i.e., snowmobiling, winter off-the-road vehicles, or bikes in summer. Cross-country skiing - winter, hiking in summer.

Separate horse and hiker camps when possible.

Special trails should be built for those who cannot walk.

For dispersed recreation, an increased mileage of trails in the more heavily used wildernesses and primitive areas would relieve the current congestion.

I find it difficult to compare recreation and wilderness system needs in one broad category. We should be reducing trails within wilderness areas. I do not believe that man-made trails are a part of the wilderness experience.

The forest roads and trails description, A-5 and A-9, has little to say about recreation objectives. Some specifics regarding trail mileage, types, etc., should be mentioned here since this is not covered earlier in recreation management (A-3).

Water and land system, timber resource system, and recreation and wilderness resource system roads, trails, etc., will have to be carefully evaluated, surveyed, etc., to prevent possible conflicts, double-work, extra costs.

There is very little mention of trails and trail relation activities in your Program Alternatives. We have read many of your research papers and articles. They do not reflect what the hikers and other back-country users want.

If you are interested in knowing what the recreation users want, you should start meaningful dialogues with those who are in a position to know - the officers and representatives of active hiking and trail maintenance clubs and other organizations that use the forests.

All trail construction should be for non-motor bicycling, hiking, cross-country skiing and snowshoeing. The use of motorized equipment as trail bikes and snowmobiles should not only be deemphasized and discouraged, but prohibited except for work and emergency vehicles.

When non-roadway facilities are to be constructed for bicyclists, they should be on relatively flat terrain, should be paved, and should be a minimum often feet wide to allow for 2-way traffic at varying speeds.

Construction of special trails for bicyclists and hikers can take place in conjunction with resource extraction through a landscaping or fill program.

Urge the Forest Service to enlist volunteers from local clubs in maintaining trails and in carrying out educational patrol work during the height of the season. This is time-consuming and requires a lot of effort by the Forest, but it gets the job done at a minimum cost and it provides an additional dimension to recreation.

Nowhere have we seen any mention of trail maintenance. This is a yearly task in mid-Atlantic and South and in many cases is not being performed at all. We venture to suggest that if you were to properly maintain existing trails and also maintain or obtain, where necessary, road access and parking facilities at the trail head, there would be little need for new trail construction.

Think more trails are needed. In our area, many of the trails have gone to ruin because the Forest Service hasn't maintained them. I would also like to see more trail systems run into cities or start there.

We strongly advocate that there be developed in this nation three types of cross-country trails with frequent stop-over accommodations along the way.

One general comment is that this Plan should be coordinated closely with the BOR's nationwide Outdoor Recreation Plan.

I suspect that the Forest Service, along with Army Engineers and Bureau of Reclamation, highly overrate recreation values of reservoirs.

Development of campgrounds and other developed recreation areas should be turned over to private developers under Forest Service control.

X X Encourage private sector development of recreation sites. Some National Forest sites could be eliminated if adequate private sector development could be accomplished.

X X The program is deficient in not considering the role of private sector recreation. Intensified management of recreation special uses is needed. The PAOT capacity for recreation could be greatly expanded through use of private sector special use developments - ski areas, resorts, campgrounds, marinas, etc.

X X Private land will need to increasingly supplement public land in the provision of this resource.

Private development of overnight facilities and resorts should be encouraged outside the National Forests but near them.

United States Forest Service recreational pursuits should not compete with nearby private developments (camping, picnicking, riding stables, etc.). Interpretive centers emphasize the ecological relationships between plant-animal-man.

Uncle Sam should more aggressively coordinate with states, counties, municipalities, and private landowners to provide for concentrated recreation. Federal lands best suited for low-density, low-technology, low-support recreation. Increase the wilderness "yields."

Should further demand for improved camping facilities continue to occur, I would like to see the high supply alternative of providing technical assistance to woodland owners on 47,000 acres utilized before more money and Forest Service land is delegated to intensive development camping facilities and associated services.

X X Only provide Forest Service operated sites where it is uneconomical for private operators to do so. Concentrate on activities that private sector cannot do, such as trails, shelter, and dispersed recreation use opportunities.

X X Technical assistance should be left to cities, parks, or counties to fulfill this need. Interpretative and orientation services should not be provided. Have good campgrounds but do not put in showers or try to compete with state campgrounds.

I disagree with the concept of the Forest Service providing assistance to woodland owners for the development of trails, parks, and recreation areas; I do not feel this is a proper Forest Service function.

X X Doubt we can accomplish all tasks enumerated. If not, suggest going to moderate on developed sites and technical assistance.

We feel equal stress should be given to assisting states and private operators in designing and operating campgrounds so as to lessen the pressure within the National Forests.

Where the demand is sufficient to support private investment of capital, we should encourage concessionaire development through private enterprise.

X X As the supply level goes from low to high, the presence of recreational residences becomes increasingly less desirable from the standpoint of public good. They constitute perpetuation of a monopolistic activity that is quite contrary to the Forest Service concept of the greatest good to the greatest number. It has become increasingly evident that the summer home puts a significant lien on hundreds of acres of adjacent National Forest land which frequently hinders and often even prevents use of those lands by the public. In addition, Forest Service administration of summer homes is costly, terms of the permit are largely ignored, and generally found to be unenforceable when permittee resistance follows the political route.

X X Be sure that no more recreation residence permits are issued.

Intensive recreational developments, recreation residences, resorts, and lodges should be discouraged and phased out of National Forests.

Second home areas generally destroy the amenities buyers seek and their purchases and should be discouraged - for that reason and for their excessive and unnecessary use of resources as well as they infringe on use of such areas by wider segments of the public than the affluent few who can afford second homes.

X X Recreation/Special Use. Plan now to phase out all special use summer homes without compensation to permittee. The public will not tolerate compensation to private citizens when the special use permit specifically states a termination date.

Concessions should be limited only to the periphery of a forest and their function well defined as a store and restaurant. Extensive recreational development by concessions should be prohibited.

This discussion should reanalyze the priority rating that the Forest Service should give to "second home" developments in a world where resources are increasingly in short supply, and all too many citizens have inadequate "first homes."

The EPFF should discuss Forest Service policy toward private persons who wish to develop recreation areas on National Forest lands.

A policy of user fees should be established. Available research indicates clearly that people tend to value less what they don't have to pay for.

Public Law 93-81, which eliminated certain recreation fees at certain Forest Service recreation sites, was unfortunate. It should be a pay-as-you-go basis, as long as recreation development and planning continue to have their very low current status at budget formulation time.

The exponents of wilderness should be charged a daily rate of use commensurate with the losses of timber and minerals income lost because of the wilderness designation. If the wilderness advocates for the Idaho-Salmon River Breaks primitive area reclassification to wilderness had to pay the potential income loss of \$75 million a year, they would not be so eager to promote wilderness areas.

User charge, Page III-9. Definitely a "user charge" should be assessed - perhaps similar to that prevailing in the National Parks or higher. Since a "user" is usually a "general taxpayer," I cannot see a basis for differentiation here.

The demand for these non-commercial outputs of the forest has been stimulated, in some degree, by the lack of a price for their utilization or by free access to them.

Recreational facilities, Page III-8. If these must be established on National Forest lands, I feel they should be built/operated with public funds. Since they are for the public's benefit, the public should shoulder some of the costs.

Fees should be charged in proportion to cost of facilities. No fees should be charged for use of the land itself.

It would be reasonable to charge a small fee for their use, which would also permit some control over incompatible users; i.e., trail motorbikes, snowmobiles, etc.

v Page VII-51, the increase of hazardous activities on National Forest land is costing the general taxpayer unfairly. Hazardous activity type people should post rescue bonds or be liable for rescue costs.

X X In regard to the recreation area fee system, it should be continued. An annual permit system for a nominal amount; e.g., \$10 per year, similar to hunting licenses in most states, would be much more convenient in administering the fee system. It would also save considerable money in selling the permits and administering the system.

We believe there should be opportunity for the private sector to participate in providing recreational facilities on forest lands.

I do not believe that man-made trails are a part of the wilderness experience.

- X X By increasing the number of visitor days, we may be decreasing the quality of recreational experiences.
- X X The last sentence incorrectly refers to the "demand for an improved environment" whereas the most critical demand is for a reduction or elimination of practices which further deteriorate it. This difference is highly significant to forestry.
- X X Quality of experience is apparently second priority behind numbers of users (PAOT). I suggest that adequate maintenance of existing facilities should be done before any new developments at all levels. Similarly, I disagree with more new developments at low levels, rather than increased management for and of dispersed area recreation.
- X X In order to preserve the quality of recreational experience, land capability will have to be determined and use limits established. Use will have to be held at the land carrying capacity or the result will be continued environmental deterioration.

The incompatibility of clearcut logging with recreational values needs to be recognized. Landscape management practices in southeast Alaska have been totally unsuccessful in mitigating the damage to recreational values that have occurred. Slash, down timber, logs blocking use of beaches discourage recreational use.

Do not develop too many new recreation sites. The tranquility of the National Forests must not be greatly disturbed.

While we agree that our forests must be used on a sustained yield basis for their timber and range resources, it seems to us there is a real danger that their esthetic or non-commercial resource values will receive insufficient emphasis in long-range plans.

What will happen to the quality and the individual recreation experience if we continue to cram more and more people into our recreation areas and into our wildernesses?

Recreation in the forests has a very beneficial effect on mankind. However, heavy use of forests for recreation should be carefully controlled to protect the forests from damage.

Before constructing or advocating new recreation developments, you should study the probable effects on nearby wilderness. We have observed some large recreation developments that have stimulated overuse and deterioration of fragile ecosystems that are very difficult to repair.

Present management activities that destroy scenic and recreational values are not dispersing recreational use. They have the opposite effect of concentrating use as more and more people are crowded into the shrinking number of unspoiled natural areas.

It is a vital and moving program for young and old alike where all can enjoy and receive health and spiritual benefits.

If it has rare beauty and charm, it should be restricted for those who appreciate such things. If it has not, it could accommodate larger numbers without harm.

Recreational use is insignificant in comparison to the number of people who use products made from timber and minerals.

The discussion emphasizes quantity of recreation with little reference to quality, and different approaches to forest recreation are not considered. The draft EPFF alternatives focus on more developed campsites without benefit/cost justification.

To what extent are demand factors considered in the location of new or expanded recreational facilities?

X The American public will only tolerate X number of dollars to go into National Forest administration. Better it should be spent for critical renewable resources (water and fiber) than for recreation pursuits.

X An estimate has been made on demand, but no estimate is available for the ability of the land to meet demands at the high level. Could this be evaluated by a matrix or charts? Legislative and administrative classifications will have an affect upon supply. These are real situations which merit consideration in terms of supply and demand for all resources. The RARE data is referred to, but these data prescribe specific assumptions which should not be used broadly for other alternatives.

Based on all the evidence, the National Forest lands will be needed for a wide variety of recreational needs. And those of us who use the National Forests want to enjoy a range of scenic views that help restore our equilibrium in this technological age.

X We should make visible what will be done to help the economically underprivileged receive the benefits of National Forest recreation.

Volunteers should be used wherever possible to minimize costs.

Provide as much recreational use as possible in the National Forest and keeping in mind the demands of timber for industry now and in future generations.

The sections dealing with recreation depend entirely upon projected development of facilities to justify appropriations. The quality of outdoor recreation could be enhanced by improved wildlife habitat, maps for cross-country hikers and skiers, trail systems designed for recreational use, and identified access to public lands. Many people are confined to developed campgrounds because they have never been introduced to the opportunities for more dispersed recreation.

It is very questionable that the Forest Service should be encouraging "car camping" and the use of off-road vehicles because of a real need for fuel conservation.

Federally funded recreation should be supported at a moderate level and be made self-supporting to the greatest extent feasible. Major attention or emphasis should be given to those activities which generate receipts to the Treasury of the United States.

The recreation preferences of the American public have not been adequately defined in view of the recent constraints.

More people mean more demand for recreational facilities and what better place than on public land as long as the resource is not damaged. The Forest Service has too long been dominated by the timber industry - livestock interest syndrome. Those days are coming to an end, and the multiple-use concept must be employed as intended.

The EPFF does not provide adequate information on population distribution and its effects on demand for recreation, and on the ways in which the Forest Service responds to such demands.

The EPFF should discuss expected National and Regional growth patterns for specific recreational activities.

The EPFF should discuss the environmental impacts of Forest Service failure to construct recreational facilities for which there is a demand or to maintain existing facilities, and of the policy of closing campgrounds and facilities which are "unprofitable."

The EPFF should examine the effects of recreation use of the National Forests on regional income, employment, and rural community growth.

Choose none of the alternatives. I do not believe that much consideration was given in outlining the alternatives for recreational opportunity, and the potential benefits to local and regional economies. Your alternatives do not mention nor do they cover recreational impact, and particularly its impact on the forest ecosystem.

X X We may still want to express an objective of converting 24,000,000 visitor days of leisure time to National Forest recreation, but we need to tell the public and Congress why this is good. How much increased productivity will it mean? How much reduced crime? How many barrels of oil will be saved by enticing people to hike rather than driving for pleasure? What will be the effect on rural area development?

X X Even with lower population levels, recreation use will probably increase because of increase in leisure time. Roads alone are not enough to take people to recreation areas in any energy short environment. Parking lots and bus systems will have to be set up, and we may even have to lay new track. Boats could be used where appropriate.

X I might note here that I am a skier and a Jeeper, but I don't want the Forest Service screwing up the National Forests to accommodate me in those interests inappropriate as they are to forest resources and to the rights of others.

X Think that the plan shows great thought and lots of hard work, and do feel that the "rockhounds" should be given consideration.

Please preserve the Boundary Waters Canoe Area (Minnesota) by eliminating adverse development of BWCA and the areas surrounding it. Certain planned activities could be disastrous.

Encourage the expansion of services that result in greater utilization of lands in the private sector and welcome the apparent recognition of the value of research on present and future problems. Beg for recognition of the recreational and esthetic values of NFS land which, all too often, are not renewable.

We believe it would be helpful to the reviewer if the effect of recreation on soil, air and water were made more specific; i.e., instead of stating that the construction of ski areas and campgrounds can harm water quality, it should be stated how construction can harm it.

V-13 Systems evaluation for Recreation and Wilderness: visitor days per year and PAOT. Hardly reflections for wilderness values! The value of wilderness lies in its availability more than its use. Also in its genetic reservoir.

With expectation that funding will be limited, more money should be available for trails, recreation, and wilderness since they have been shorted for 10-20 years in favor of timber cutting and road development.

Severe restrictions are in order for trail bikes. Nothing is less compatible with the general peace and quiet of the outdoors than the snarl of a trail bike engine. Intrepid trail bikers can't seem to resist trying to climb hills right up the fall line, resulting in severe gully erosion.

X X We need research to get more effective programs for serving the public through visitor centers, which are much needed in the Columbia Gorge. National Park Service visitor centers vary greatly in effectiveness.

X X Further, from the content of the plan, it appears that the Forest Service is laying the groundwork to somehow open-endedly accommodate off-road vehicles (ORV's) in National Forests, despite the controversy surrounding the use of such machines on public lands.

X X Need to know level and location of present use. Also need to know if land can handle this much use.

X X We lose quality if we go to the high alternative.

X X We must protect the concept (of wilderness) as a valid management objective of National Forest land. Do not use mismanagement as a budgetary tool.

X X "...better recognize and protect landscape values in the design..." has to be a consideration in all systems if it's to be meaningful. We're kidding ourselves and the public if we put this in R&W and don't include it in timber, mining, roads, etc.

X X Order of priority should be: (1) adequate maintenance and improvement of existing Forest Service facilities; (2) development of new recreation facilities and related roads; (3) trail construction and maintenance; (4) technical assistance to woodland owners; (5) interpretive displays development; (6) study of wilderness study areas.

X X Use of the term "protect landscape values" is a poor choice of words. It denotes a "don't touch" philosophy. We should be managing the land for a combination of products and scenic values.

I think the public will now find that some of these luxuries...such as making clearcuts beautiful...may not really be worth the substantial expenditures of manpower and funds and the lost growth potential of our land.

The display chart calls for adjustment of other resource programs to fit with the recreation resource, but the chart does not indicate that adjustments should be made in the recreation program for coordination with the other resource systems.

The people of this country have been constantly brainwashed into believing our mountains are good for nothing but recreation and wilderness. Consequently, development of our vital resources have been curtailed by these poorly informed individuals until this country now is dependent on imports and faces grave consequences.

On page VI-14, showing recreation and wilderness statistics, the high level as of 1979 shows a capacity for people at one time of 1,100,000. Yet in the Appendix of this plan, on Page A-4, the statement is made "The present capacity of all developed sites exceeds 1.3 million persons at one time." This is an obvious error and merits correction.

Total National Forest visitor use defines visitor-day in a non-standard way, and not comparable to other agency figures. Another definition is one visit of fifteen minutes or longer on a given day.

Alternatives that address different aspects of the energy issue and its effects on recreation use of the land should be included in the long-term plan.

The discussion of recreation activities that occur on National Forest lands seems to be incomplete. Failure to discuss the recreation activities of hiking, boating, picnicking, swimming, nature study, sightseeing, and other winter spots (besides skiing) seems to imply

their relative unimportance to the National Forest lands scene.

The outdoor sportsman has been on the short end of the stick long enough. The ranchers, timber, and mining interest have had priority to our public lands for years.

Moderation serves to help "ease" a new program to the insatiable recreation appetite of the nation. Don't hit the nation with too big or too new a program too soon.

Some recreational uses do not mix well; hikers and off-road vehicles, for example. Efforts should be made to take care of such incompatibilities.

Rock-climbing and mountaineering, for instance, require unique and sometimes rare land forms. Such recreational uses should be given preference in allocating lands to various uses.

Two points which should be implemented at any alternative are: 1) vegetation protection in and around heavy use areas, and 2) accelerated study of 2.4 million acres from the final new study area list for classification as wilderness.

Recreation and wildlife is confused. On page III-8, lines 16 and 17, is the question, "Should the Forest Service acquire land specifically for wildlife protection?" Why is this question placed under recreation? If this is because of hunting, the point of view is mistaken because wildlife is much more important per se than it is as mere targets for "sportsmen." Recreation is a human activity, not a resource. In wild or even relatively wild country, it must be kept in hand like any other human activity in order to retain whatever of wildness remains.

Feel that hunting and fishing in the National Forests should be controlled strictly by the National Forest System itself since this land belongs to all states and all people. Hunting and fishing license fees should be retained by the Forest Service.

You have provided alternatives, but with little substance and defineable solutions. You make a laudable (but minimal) approach to carrying capacity and dispersed recreation; but this is not enough for an entity (wilderness and recreation) that is assuming prominence for the American public. Your emphasis is wholly secondary - more of a subordinate type of planning.

We get the impression that 90 percent of the time you think of recreation users solely as car campers and picnickers and that it is only with great effort you remember hikers, mountaineers, canoeists, cavers, skiers, skimobilers, motorcyclists, hunters, fishermen, amateur botanists, geologists, and birdwatchers.

The Forest Service is urged to recognize the special recreational resource needs of climbing.

High supply activity is recommended where the private sector supplies funding, such as developed alpine ski areas and ski touring centers.

In this area I cannot identify with any of your alternatives. I disagree violently with any plan wherein the Forest Service develops recreation sites in the backcountry. Improve access - yes. Facilitate public education regarding the forest - yes. Build trails outside of the roadless areas - yes. Concentrate camping and recreation sites along the major highways - yes. Otherwise, leave the accommodations to the enterprisers of private enterprise; expand the National Wild and Scenic Rivers System and the National Wilderness System as rapidly as possible.

- X X In many cases, maintenance money is being diverted to recreation planning or program management.

The effort expended by National Forests to include the interested public in their Hearings is highly commendable. It is also very expensive. Could National Forest System adopt some type policy which would be applicable to all such Hearings?

- X X The presentation of the Recreation and Wilderness System in the EPFF needs to be strengthened, however. Outputs are mostly expressed in increased visitor days use, PAOT capacity, miles of roads, miles of trails, etc. The two key indicators' outputs are visitor days and PAOT capacity. These figures are probably valid, but if they are critically analyzed, they don't give good support for an increased National Forest recreation program.

- X X Wilderness fire management should be an important consideration in planning wilderness activities.

- X X High alternatives should be followed in selected geographic areas, particularly R-5 and R-3.

This section is poorly organized, and information provided is too sketchy to be meaningful. It is therefore suggested that: 1) Respective intensive and extensive recreation uses be discussed separately, particularly as regards commercial outdoor recreation facilities and services; i.e., ski developments. Also, for off-road recreation vehicles; 2) Reorganize this broad program system to cover separately; a) National Wild and Scenic Rivers System; b) National Wilderness Preservation System; c) National Trails System; d) National Recreation Areas; 3) System should also have regional perspective to include National Park System and other public and private lands. This would necessarily entail campgrounds, transportation system, visitor information centers, etc. How does this fit into long-range plans and objectives of the BOR? 4) Define basis of PAOT calculations and rationales for indicated projections.; 5) Define manpower needs relative to alternative program levels. What is role of youth and manpower programs, if any?; 7) Define and incorporate research needs and priorities.

Page III-7 under wilderness is made mention of 54 million acres presently under review for possible wilderness classification by the National Park Service and National Wildlife Refuge. We're sure that you just forgot to mention that 90 percent of that acreage is in Alaska.

Establish strict controls of off-road vehicles to avoid damage to flora and fauna.

We would add: (1) The need for recreation trails, not just for **transportation** but for recreation use of low elevation areas near urban areas and for dispersal of Wilderness and backcountry users. (2) The need for small, low-standard campgrounds, especially in areas newly opened up by roads. (3) The need for a major visitor center in the Columbia Gorge, coordinated with other agencies.

We believe recreationists and environmentalists have few qualifications as experts in this field. Only trained foresters, both in the National Forestry Service and professional, and those experts in the economics of the Nation should try to decide how much timber should be harvested in our National Forests, and these decisions made on an annual study!

RESOURCE - Range Resource System

Removal of livestock grazing, in most cases, is not the answer to improving these critical ranges. A different management system would likely improve conditions much faster without adverse economic impact to permittees and surrounding communities.

Removal of livestock from fragile land or land that has already been damaged is a must. Other land should be located to displace these animals and recovery allowed.

XX Page VII-20. How will livestock grazing be removed from 2.4 million acres of deteriorated land when this land is mingled with better ranges on most allotments. Changes in class of livestock, on some ranges, may be more effective in improving poor ranges than is livestock removal.

High yield grazing seemingly disregards the possibility of using the money instead on potentially more productive private ranges. Removing livestock use would do wonders for many National Forest ranges with improvement of vegetation and watersheds--at a greatly reduced cost.

Accelerate management and development of highly productive ranges. Encourage the improvement of State and private rangelands as a means of meeting the increased demand for livestock production.

Good range management and control (without necessarily increasing allotments) that are two of the most important aspects of this high alternative. Overgrazing, livestock trespass, abuse of resident wildlife, particularly the coyote and the wild mustang, have taken their toll on the Nation's ranges.

Intensify grazing on those lands that can handle it and try and rehabilitate those that cannot.

XX The term improved management is ambiguous--unable to pick an alternative.

What do you mean by "treatment through improvement management?" In the past, the Forest Service has called chaining, tree-crushers, herbicides, and so forth, "improved management." If that is what you mean, this system is another good example of the point made above (our comment 1-d) of combining opposite ends of public policy issues in one alternative.

I am against intensive range programs--usually mean herbicides and fertilizers.

XX All work should be to improve present allotments before any new ones are issued and land should be looked at and unsuitable land eliminated from AUM calculation.

X X As with the timber resource, let us do the proper job and find out whether we can increase the animal use allotments. It seems to me that emphasis on proper management, and the allotment therefore, should "automatically" provide higher use goals. Set these latter goals low but still somewhat higher than present ones.

X v The increase in the available grazing for additional animal months should be considered a complementary result of the improved management on existing allotments. Improved management on existing allotments is the single greatest opportunity for accelerated range improvement and potential increased stocking.

We understand it has been reported that as much as 50 percent of the rangelands in one of the Regions are in unsatisfactory condition. Overgrazing seems to be an inexcusable excess. The Forest Service should not consider providing more grazing until present conditions are corrected.

Increased allotment management, for example, by increased use of rotation grazing systems, is a fine proposal.

We recommend a growth program to move the Federal lands into more intensive land management through land use contracts with the private sector.

X X We must get more cooperation, participation, and dedication to management of range areas.

We believe that both livestock and big game numbers could be increased by more intensive range management. We encourage such an approach.

X X I favor an increase in red meat production commensurate with quality range management. Where in AUM's is it possible by intensive management systems without increasing the number of allotments?

Range improvement, at virtually no cost, could be achieved by the reintroduction of fire into the yellow pine region and throughout much of the intermountain west.

I am against all livestock grazing on National Forest timber land.

As a recreationist, I just cannot bear to bring myself to promote increased AUMs and acreage allotments in the National Forests.

Eliminate grazing permits within units of the wilderness system.

One of the most abused practices. Phase out the allotments. No predator control allowed.

Present range is now overgrazed. It is sheer stupidity to increase it. Where is your alternative for decreasing grazing so range can recover?

With rangelands in very poor condition, much more removal of livestock from National Forest Systems rangeland is in order.

No increase in grazing allotments should be made unless they do not overshadow other uses, e.g., hunting, fishing, etc.

Doubt feasibility of increased range allotments without habitat deteriorations.

I am disturbed by the proposal to increase AUMs on Forest Service ranges when it is generally agreed that range conditions now reflect years of overuse. The objective, with increased funding, should be to reestablish desirable plant communities rather than to measure success by the number of grazing animals that may be accommodated. It will be a long time before range values have been adequately restored to permit increased grazing.

X X We need to encourage more use and better use at the same time.

X X After LUP tells us where we can graze and meet these requirements (no soil loss or vegetation depletion), the grazing resource should expand to the high option on those lands.

X X Emphasis must be placed on range environmental analysis and development of good grazing management plans based on REA. Action must be taken to reduce grazing to capacity or close allotments where other resources are being damaged. Allotments should be under improved management eventually, but inventories are first priority. We've wasted too much time and money on range improvements on poor allotments that have no REA and little real potential. Should not increase AUMs under any circumstances until REA is done and management plans complete.

I question whether the potential for grazing has been fully reviewed.

Favor lowest possible grazing program to minimize effect on environment such as competition with wild game which provides a recurring source of food and recreation for many people. I question wisdom of allowing private cattle, etc., to graze on public land in competition with wildlife.

X X Remember the "Nevada report" and what it is doing to the BLM. Can AUMs be increased more than 50 percent on a sustainable basis?

X X We need more coordination with S&PF to reduce pressure on Forest Service rangelands.

Initiate broader programs to provide technical assistance to privately owned forest range. The assistance would allow private owners to pick up additional AUMs without depleting Federal rangeland.

X X Federal land is best investment for outputs versus private opportunities.

X X Allotments in poor condition with no hope of improvement should be closed to grazing and the money spent on developing alternative sources of forage; i.e., private land, or BLM.

- X X Range resource system will continue to be of local and national importance in management of National Forests and Grasslands. However, Forest Service is not the lead agency in range resource and should concentrate efforts on public lands. Also, should place more emphasis on range potential as to areas not currently receiving due emphasis. Believe some of the eastern areas have potential to return greater dividends than are being returned from the "range" forests.
- X X Through a well managed range resource program, the total ecosystem can be enhanced. It is extremely important that the State and private program be undertaken.
- X X State and Private is not considered under low or moderate. This is not in keeping with reality. Levels showed show total level of output for all of the Nation's forest lands with a breakdown for National Forests and other.
- X X The inclusion of some coordination with privately-owned rangeland will help upgrade both the range resource and the management of that resource on private land hopefully relieve pressure on National Forest System rangelands.
- X Y There is so much remaining to be done on National Forests that extension of work to other lands seems of doubtful value in the next 30 years.
- X X Feedback should be assumed for all programs--does not need to be included here.
- X X Let's get serious about range. Rehabilitate what we have and take a good hard look at a maintenance program. Monitoring and feedback are needed here.

VII-19, 20, 21, Range Activities. You should recognize that some of the vegetative-type conversion under this activity, for example, sagebrush to grass, can have adverse impacts on wildlife habitat. Also, conversion of juniper to grass results in visual impacts.

- X X Maximum effort to integrate wildlife management into the system, remembering that to the local and regional economy a deer may be worth several sheep, and an elk several cows, even though the local rancher may disagree.

All of the alternative supply activities appear to have one thing in common. Nowhere is there any recognition of the need to determine the impact of increased domestic animal grazing on native wildlife populations.

Should definitely improve and protect all possible wildlife habitat and all endangered and threatened species should receive the very strictest protection, especially predators.

All alternatives should be explored and utilized to improve both private and public rangeland. However, any improvements should accrue to wildlife and livestock equally.

Our grasslands should be carefully used for wildlife as well as cattle, and fees charged to cover adequate supervision.

X X These lands are not a pasture to be managed for maximum forage production for domestic stock. Other resource values need consideration too, not lip service.

The intensive approach to livestock grazing would be at the expense of wildlife requirements, and would lead to a monoculture of sheep or cattle at the expense of predators, prairie dogs, and wildlife ungulates.

Opposed poisoning coyotes in order to placate the obviously uneducated demands of farmers. While coyotes do take an occasional sheep or chicken, they are a vital link in the ecological pyramid. Coyotes help to keep the populations of rodents down.

X X While increasing grazing activities on National Forest lands, proper consideration should be given to native wildlife.

X X Avoid conflicts with wildlife.

Why should National Forests increase grazing--decrease it and lessen impact on wildlife.

Ranchers would like to graze as many cattle on as many acres as possible; their demonstrated concern for wildlife habitats is near zero.

On overgrazed land, livestock owners deliberately destroy native animals that prey on and compete for food with domestic stock.

Not one word about predators or their effecting wildlife and also domestic livestock grazing. Despite the denials by environmental groups, predator numbers have exploded since banning intoxicants and the result is large in numbers of animals being killed.

Remove grazing from recreation areas. The two uses are incompatible.

I oppose use of any defoliant on National Forests.

The Forest Service must also attempt to decrease and eventually eliminate the use of chemical herbicides in controlling noxious weeds, not only because chemicals are a hazard to water quality, but because they endanger the well being of all living things that feed off the land. Everything in the ecosystem has its purpose. Perhaps it would be simpler to live with these "weeds" and to take advantage of them rather than fight them.

X X A large program of herbicide treatment to vast areas of rangeland should not be undertaken until more knowledge of the undesirable side effects of chemical herbicides are known.

Grazers should accept predator losses and not be allowed to use poison, traps, aerial gunning, etc.

Junipers and pinyon pines should not be eradicated in the Southwest.

Environmentally acceptable methods of cheatgrass and sagebrush control should be devised.

Program does not discuss noxious weed control.

Object very strongly if increased carrying capacity is to be achieved by building more roads into now unroaded areas. Ditto water developments. I hope the Forest Service will take very hard looks at its type conversion or drastic modification schemes--herbicides on sagebrush, chaining pinyon-juniper.

Have seen a lot of poorly managed grazing on the National Forests, with resultant deterioration of the environment, damage to the watershed, erosion.

Under no circumstances should overgrazing or range misuse be tolerated; such action violates public trust, and mocks the purpose of the Forest Service (and the BLM) as a conservation agency.

Overgrazing causes erosion, pollution, and the death of desirable plants and must be prevented.

X By increasing grazing, we would increase siltation, especially in some of the Western States. This could also reduce water quality. However, it would increase streamflow; at the same time it would increase the incidence of local flooding. We need to tell how this plan will be implemented.

Grazing abuses have historically been one of the determinative agents of land and resource deterioration in this country and others. The Forest Service has not shown adequate recognition of this destructive potential and all alternatives must be rejected as potentially excessively extractive. Grazing need not be eliminated from the National Forest System, but a more conservative approach to realistic carrying capacities must be adopted.

Few forests today escape the peeled bottoms caused by cattle, the eroding slopes caused by sheep, or the resulting damage to watersheds from grazing by both classes. Consider these four problems: (1) Yearlong or nearly yearlong grazing on southwestern forests; (2) too early grazing, compacted soils, weeds; (3) trailing on steep slopes by sheep; and (4) annual removal of soil nutrients with little replacement.

Research and programmed recovery of the overgrazed and eroding landscape wherever it exists is essential.

Grazing is another area of concern. The figures given for deteriorated rangelands in need of rehabilitation and erosion control are clear indications that stocking levels are too high on many allotments.

Overgrazing occurred under the supervision of BLM and Forest Service. All future grazing activity must have a ceiling value of animal units that must not be exceeded no matter what the circumstance.

XX Page IV-14, Range. From the beginning of National Forest management, the Forest Service has worked to reduce the amount of grazing on the Forests because it was too great for the forage productive capacity of the land; that is, the grazing capacity was being exceeded. How does it happen now that we can look toward an increase of 12 percent per decade, and 20 percent during the 1970-1980 period?

The report emphasizes beef and mutton production too much. The value of grass for achieving high quality water must not be downgraded.

The paucity of suggestions for improving range and wildlife values betrays the hollowness of the "multiple use" practices of the Forest Service. These are clearly afterthoughts to the water, land use, timber, and recreation uses.

It is a valid contention that the numbers of livestock currently in the National Forests already are in violation of the multiple use concept. The damage done by livestock is particularly reprehensible because the use of range in the National Forests is not a very efficient method of livestock culture.

XX Major emphasis on protection of soil and water "system."

Rangers shun reductions today, prefer cross fencing which forces cattle to skin off the steep slopes to improve the bottoms. An average reduction (needed on most forests) of 40 to 50 percent followed by simple rotation systems would better accomplish the improvement desired. Your plan favors heavy investment on marginal lands. Our suggestion would accomplish much the same thing and would lessen the need for more erosion dollars on future high option Forest Service plans.

If National Forest ranges are treated like most BLM and private ranges over the past 50-100 years, they may be beyond reclaim. An effort, however, should be made and strict grazing limits set to allow sustained forage yield.

What this comes down to is a confession that the range is now overgrazed, that grazing must be eliminated from a large area and that restorative measures must be taken. This, of course, has been common knowledge for many years. Unfortunately, the confession is coupled with the planned intention to increase grazing on the public domain with the confidence that the technological fix of management can protect the range. This is a reversal of the appropriate priorities. The Forest Service should act at once to protect the range and worry about increasing its use after it has stabilized the situation.

I find it hard to swallow the statement, "At both the low and moderate supply levels, the current overgrazing of more than 70 million acres of non-Federal forest land with accompanying negative effects on soil and

water would continue." --Page VII-2. This is an admission that these adverse impacts have been and are going on. We should be able to expect better management of our resources.

VII-7 and especially last paragraph on 8. Range Activities. Before this program is expanded, we urge that you make sure through research that unacceptable adverse impacts on soil, water, wildlife habitat, and recreation do not occur as a result.

Much of National Forest land is sadly overgrazed already. How would we increase range allotments without fertilizing National Forest lands and grasslands? We would also have to irrigate in some cases.

A "high" alternative is needed to catch up with the backlog of problems, but not to increase animal numbers on the range.

X Grazing fees are unequitable and seem far too low for use of National Forest land. Continued grazing in wilderness areas is incompatible with the wilderness ethic and will hopefully be phased out.

Fees should be much higher in order to truly reflect value of received by the grazer and necessary investment by the Forest Service. Much stricter regulations of lessors' structures and camps on National Forest lands should be instituted.

Efforts should be concentrated on an ecologically sound use of land which sustains long-term grazing. Grazing fees should be made equal to those for private land use, and all costs related to maintaining long-term ecological stability of forage land should be borne by the users.

Charge fair market prices--taxpayer should not subsidize cattlemen.

The ridiculously low rates for public grazing should be doubled or tripled.

Restore private rangeland, the user paying the cost.

Should have a favorable effect on livestock feeding costs, under high option.

On page VII-40, the use of the term "volunteer contributions" from grazing permittees is misleading.

Keep their costs (per cow unit) low by allowing existing fees to prevail for the next ten years.

United States Forest Service grazing permits in Carter County generate in excess of \$25,000 yearly which more than defrays the range funds spent on Carter County allotments. In contrast, no effort is made to collect funds from sportsmen, campers, picnickers, and other public users.

Shortages of feed grains, less and less cultivated land for pasture, and inflationary pricing may indicate that grazing in National Forests will become of greater importance. A section on grazing is needed in Chapter III if the section on range in Chapter IV has any real meaning.

With increasing loss of irrigatable crop land, livestock production is being loss nationwide and thus the Forest ranges must help in bearing this load.

The red meat produced by the range livestock industry is one of our most efficiently grown agricultural products. The current national feed grain shortage and increasing world demand for grain, verify the soundness of expanding the harvest of renewable forage from all Federal lands.

XX Here again an expanding economy and population will require increasing red meat production. With proper financing and management, the National Forests can provide some of this increased production.

XX Food needs of the Nation leaves us no alternative but to produce all we can from the rangelands suited, or that can be made suited, to meat production at lowest cost.

XX After 1984, the high level will probably be the best alternative and we should plan accordingly. If current trends continue we are going to be more concerned with the basics in life rather than the amenities.

The current national and world food situation appears to add complexity to Forest Service decision making on livestock grazing. Specifically, a simplistic projection of past increases in beef consumption and range use is inappropriate today.

Cattlemen desperately need forest range for summer feed, especially in today's expensive feed market.

Range use needs are already increasing sharply proportionate to feed-lot use, and forest rangeland use must, can, and should increase, to utilize a valuable resource in production of needed food.

XX Decrease in consumption of meat, if it occurs, will decrease demand for range. Increase of world population will result in demand for grain, which would eventually have to be diverted from use as cattle feed.

Believe that the land and the people of this land will be better off if the national production goals for 1984 are not met. Because of the global food shortage, we should shift to more grain production as a way of meeting our food (and protein) needs.

XX It is going to be harder to expect increases in the future at the same rate as the past without a considerably higher investment for two reasons: (1) Opportunities for improvement have been explored by both the user and land manager and management has been initiate with the highest returns possible; and (2) there is competition for uses on specific land areas that will likely reduce the grazing land base.

XA Page IV-14. The efficiency of sheep is underplayed in utilizing forest rangelands. Most lambs that leave the National Forest never go to a feedlot, but are sent to market directly from the range. Thus, little if any supplemental feeding is required to obtain a choice product.

X Range cattle eat grass produced by free solar energy. This alone should be worth some added emphasis.

X Grass fat cattle position is improving with energy shortage. We are not meeting our minimum responsibilities now with current financing. This is going to catch up with us before too long.

X High level would subsidize meat production and improve Federal land at the same time.

X With increasing fertilizer costs, increasing feedlot costs and increasing need for food, we should make a greater effort to make our ranges more productive. Should concentrate on areas that are truly productive.

Remove the permit system from local control.

Am in favor of strict control over grazing permits.

Pages VII 19-21. I find this to be a negative approach to forest range grazing. It tends to emphasize the bad of overgrazing which isn't fair.

The grazing program has an economic rationale and should be subjected to cost-benefit analysis. The EPFF should describe in detail how grazing fees are calculated to assure the Government a fair return on its investment, including all costs of management, environmental protection, and other uses foregone (e.g., hunting fees lost because wildlife is displaced).

X If we "remove grazing from 2.4 mm acres of poor condition National Forest System rangeland" and simultaneously "increase the National Forest System available grazing by 5 mm. AUMs"--does anyone know what the price tag will be?

Program does not discuss cost of new improvements to obtain output targets.

X Without relative cost data, it is difficult to formulate meaningful opinions.

X Projected demands for forest resources are based upon population growth, advancing technology, etc., whereas program alternatives are based upon output of goods, services, and amenities by costs. It's unclear where the two converge or what the public can expect to have--or be forced to give up--at each level.

Program does not discuss maintenance of improvements in relation to costs.

I also question consideration of additional permits when historically there has been so much abuse of a privilege by the permit holders. I also feel there must be strict enforcement of grazing conditions privileges.

Much of our public land is over grazed. Ranchers have no more right to public lands than any other citizen, but the Government has always catered to them.

X X Return on range dollars is small. The time is past when a small, vocal group of stockmen should be allowed to control for personal profits the rangelands.

X X Special interest control of public rangeland should be limited until the results of past use have been corrected and until appropriate access agreements for entire public land via private access points can be resolved more in favor of the public.

Does lack of emphasis on range research (VI 23 to VI-35 and appendix 35-51) suggest that no more range research is needed in order to attain the increases suggested by the graph on page Vi-16?

We realize that the Service is under pressure (1) to get moving on range management and (2) to research the impacts of intensive range management. However, it does little good to have a nice package of research results after you have implemented the researched program nationwide.

Initiate research on utilization of native species (Bison, antelope, deer, etc.) as managed meat supply.

X X We need the data that would be provided under the "high" alternative--research social and economic to do a good job--under moderate to be sure we are using rangelands properly within land capabilities.

Any research program analyzing your range resource system should be instituted.

Feel you have the capability with present knowledge to really do the Nation a service in this area.

X X Technical expertise and resource response capability is available, but need to do away with archaic laws and policies that have prohibited managers from implementing programs necessary for increasing production of forage and pounds of red meat.

X X The structure of this response form makes it very difficult to convey the true opinion of the respondent. This is especially true for the timber and range resource system categories. Neither of these categories has an adequate array of options and appear "loaded" or as having a "stacked deck." Thus, it would appear to be very difficult to gather any meaningful information from my input in a questionnaire structured in this manner. I suspect that this applies also not only to other Forest Service people, but even in a magnified way to respondents from the public at large.

Unable to choose preferred program level due to insufficient information. How is land and water resource system affected by possible increase in grazing allotments and "intensive" range programs? How much poor or marginal rangeland is anticipated to be brought into production over the course of the planning period? What is relative impact of program levels on wildlife grazing populations? What are the program implications for predator control? What is the extent of need for prescribed burning?

Is range inventory contemplated? What about water development projects? Are increases in grazing fees needed? Strongly urge the preparation of an environmental impact analysis to truly make this an "Environmental Program for the Future."

However, the EPFF does not spell out two major questions: First, where does, say, the 5 million AUM grazing increase come from? From the 1,730 increase in managed allotments, or from the "treatment through improved management" of 2.4 million acres? Or from both?

- X Can we remove livestock grazing from 2.4 million acres in poor condition? Still we are grazing by 5 million AUMs. Improved management on 2.4 million acres of deteriorated land would be tough to do.

Poor condition rangeland as used here is a misnomer and a trap. If wanted to refer to it, then use terminology such as deteriorating, critical area, below site potential, low range vigor, or some other term. Removal is not the answer to the problem.

If you would refer to the area guides for Region 6, you will see that suitable ranges are mostly fully occupied and many have been overutilized and undermanaged for decades. The guides point out that the most economical place to grow red meat is not on National Forest lands--it is on lands with a longer season, better access, and fewer conflict.

Higher elevation lands generally over 6,000 feet, wet meadows, and wilderness areas should not be grazed.

Areas classed in poor condition very likely have a low site potential or are producing site potential.

Certain areas within all forest lands are naturally unproductive and always will be and should be used at their potential and not as an excuse to restrict usage of other more productive lands within the same area.

More stringent regulation of grazing bases on stocking rates.

- XX Don't increase grazing capacity at the expense of timber production.

- XX The unusually difficult socio-economic environment associated with public land grazing allotments makes the high supply virtually unattainable.

Livestock deserves just as much consideration as recreation uses, but certainly no more.

- XX Don't believe you can expand livestock production to any large extent without providing additional water and facilities. I see no provision for this.

Grazing on Federal lands might be best accomplished by a new agency, to which the best rangelands could be transferred, leading the U.S. Forest Service to rehabilitate its former rangelands removed from grazing.

- XX It is highly presumptuous to assume that without the Forest Service high supply alternative, there will be no privately owned forest range under improved grazing management by 1979 (that's what the chart indicates). Whatever happened to the SCS (or does the Forest Service consider them to be ineffective?), State and county extension services, and the Society for Range Management?
- XX The functions under private forest-range should be performed by other agencies.
- XX We either need to do a 100 percent range management job or get out of the business. There are already some USDA agencies to work with grazing on private forest rangeland. Let's stay out of it or work toward decreasing the responsibilities of our sister agencies.
- XX The State and Private program under the Range Resource System is not considered until the high supply alternative.

Transfer management of National grasslands to the Bureau of Land Management. More stringent regulation of lessee's of grasslands based on recommended stocking rates as determined by research.

We see (VII-40) would recommend, for one thing, that receipts from grazing be made available to the Forest Service for use in rangeland management and improvement, rather than being sent to the Federal Treasury.

- XX AUMs should not be used as an indicator of output in this system. Output of beef, mutton, and wool, etc., per acre, should be used instead. Because rangeland varies so much in quality, an increase in AUMs may not change final outputs per acre.

Take a greater interest in the National Grasslands. These are not purgatory or the FBI's version of Butte, Montana.

Consider greater control and management by range ecologists and hydrologists rather than Foresters.

It should discuss the grazing capacity of different types of land and how the Forest Service determines this. There should be a description of the supervision and control the Forest Service exercises to prevent lessees from exceeding the carrying capacity of the land or to force them to restore land they have damaged. The EPFF should discuss the extent to which additional appropriations for such management activities would reduce the need for future investments in range improvement programs.

The Range Resource System indicator also includes a unit of measure for areas improved, but none for areas run down.

- XX If we're going to increase our output of beef from the range to this high supply alternative, I think we should be looking to the East (especially southeast U.S.) and not the comparatively arid West.

Insofar as grazing is concerned, I would like to quote sections from this report that I feel are contradictory. VII-32, "It is a cheap livestock feed source, and livestock producers are unlikely to abandon it." VII-35, "Federal fiscal policy..." The table on VII-36 indicates that under the low alternative although the AUMs remain the same, the revenues will increase 240 percent. It, therefore, does appear the charges for grazing are not fair, that it is a cheap feed source, and the statement on page VII-35 should indicate that while payment is made for these services, they may not represent reasonable charges. Remember the fees should not be set so low as to encourage the continued destruction of National Forest lands. The first paragraph on page A-6, "A fee representing fair market value..." is totally inaccurate and should be removed. What bothers me about this statement is that there are many persons in the Forest Service who believe it.

X I have to believe that most of it (EPFF) is beyond their (the public's) ability to really comprehend it; especially since most of the public can hardly tell the difference between the National Forests and the National Parks.

Feel a compromise can be achieved between National Forest System and the cattlemen.

X Should be a close relationship between range management and fire management.

In management of the range resource fences are a must. It may be that in the case of some streams in a range area, fences will be necessary to perpetuate or reestablish a high quality fishery.

X A minimum of fences to effect management, and those placed to affect aesthetics and wildlife the least.

X It should include consideration of clearing of timber from some areas, and investigation of the suitability of grazing in timber types where it is now frowned upon.

IV-14, 15, Range. This discussion should reflect the expected effect of the proposed changes in grading rules for meat.

On page VI-17, the low alternative will "maintain the available National Forest System grazing at 11.3 million animal unit months." On page VII-33, it appears that there is presently 213 million AUM's grazed on all rangeland, both public and private. It therefore seems that the national forest rangelands account for only 6 percent of the total AUM's that are currently grazed. I feel that this should be pointed out on page VI-17. Why should 6 percent of the total AUM's be allowed to cause the destruction of millions of acres of public land?

Grazing permits should require public right-of-way across intervening private land as a condition for the permit. Permits should be offered at public auction at 5 or 10 year intervals to increase fee yields and moderate the formation of ranch empires usurping the public lands.

We urge that a goal be established in this section for livestock and wildlife forage conditions that will permit increased utilization of Forest Service lands for forage. Improvement of only 2.4 million acres of deteriorated land is inadequate in relationship to projected national needs for food, fiber, recreation and water.

Should place greater importance on livestock industry--and the related aspects--for itself alone rather than livestock production as a "side-line" or by-product of some other forest system resource uses. Put emphasis on what we can do to increase production of pounds of red meat, and what affects other uses of the resources have on that production.

On page VII-42, I question parts of the third full paragraph beginning with "Many farms..." According to the table on page VI-17, under the low **alternative**, the AUM's will remain at 11.3 million, I do not understand how this will result in a reduction of the amount of grazing permitted.

Changing technology has opened the door for livestock producers to begin feeding fiber products in lieu of feed grains. This in its infancy, but....will be a boom to growers. No longer will it be profitable or reasonable to risk valuable animals on the range. I look forward to the day when permits are abolished and the ranges rehabilitated.

RESOURCE - Wildlife and Fish Habitat

The indicator outputs (water quality improvement and sediment reduction) for the Land and Water system could provide some indication of habitat improvement. As pointed out on page VII-22, good soil and water management usually provides suitable fish habitat.

Improve habitat and all areas where it has been changed by man.

This value is clearly an afterthought. You should be providing habitat for all animals native to the National Forests. If that means leaving large acreages uncut as habitat for marten, fish, wolverines, spotted owls, and other "mature" forest denizens, then so be it.

How does the Forest Service intend to mesh these vague goals (Fish & Wildlife) with the overall plan for timber harvest? Does improvement mean token efforts on massive clearcut areas?

"Improved habitats" for game animals should not mean obstruction of lesser organisms, small animals, and possibly valuable plants, as has too often been done in the past.

Coordination of all activities is required by law. Let's stop thinking of functional systems, and in terms of land management instead.

- X The high alternative is not compatible with high timber supply alternative under present socio-economic conditions.

If the land and water are to be managed in such a manner as to improve their attendant fisheries, especially anadromous fisheries, it would definitely strengthen our nation.

- X Y Little difference between low and moderate. Our efforts should be directed toward coordinating ongoing activities and programs.

- X X Habitat improvement must be carefully coordinated with other uses.

- I X A lot of this will occur when timber range and watershed are put in good condition.

- X X This resource is an amenity that should be limited to increased production through coordination with other resources. Endangered species, that will absorb money and manpower at the expense of "real" human needs, can best be perpetuated in limited numbers in parks and zoos.

- X X "Improving" the habitat for one species invariably makes it worse for others. I feel this (habitat management) is a low priority when funds are limited...

- X X Increase salmon stream improvement to high alternative level.
- X X No mention for any levels of steps to modify road construction and timber harvesting to try to benefit wildlife (as opposed to merely minimizing adverse impacts).
- X X We need to improve coordination better than 30 percent if we are going to be the future managers of National Forest land.
- X X We can do a considerable amount of wildlife habitat work by coordinating with other activities. It will take dollars to follow up.

Coordinate habitat improvement with other management activities. Restrict hunting if necessary.

- X X Habitat improvement must be coordinated with other activities, but it can be of great benefit to local economies.
- X X We have a long way to go here. Is direct habitat improvement on only 1.6 million acres enough? More than lip service is needed for wildlife habitat. Too much of past management has been just that; the wildlife has almost been considered a byproduct of other activity, it was not really managed in most instances.
- X X If wildlife really is included in multiple use, the concern for inventories, habitat improvement, use, and protection should be reflected in these alternatives more than they are.
- X X Emphasis should be placed on inventories and planning. Shoot for the high level for following the 5 to 10-year period.
- X X Too little is being done on Fish and Wildlife management. In an area of high population density, more emphasis is needed on fish, game birds, and both small and big game animal management. More reforestation is needed with primary emphasis for wildlife food and habitat.

In planning your timber treatment activities, we urge that provision be made to leave, or to provide, adequate cover areas for wildlife.

The restoration and improvement of wildlife and fish habitat is a high priority item. Since most of the damage comes from stress by commercial use such as logging, grazing, and mining, conditions which have damaged should be eliminated or corrected first.

Except for damaged wildlife and fish habitats, I find too much emphasis on "improvements." What is badly needed is recognition of the requirements of, and protection of, the natural habitats to which they have adapted. In Southeast Alaska, for example, there is entirely too much emphasis on stream "improvement" programs and almost nothing being done to protect the natural stream environment.

If other programs are carried out within environmentally acceptable limits, it will automatically follow that a good Fish and Wildlife habitat will be present. I feel a definite attempt should be made to increase wildlife populations on Federal land through cooperation with State Agencies. There should be enough flexibility in programing to implement more protection of streams in the Northwest important to anadromous fish species.

If the Forest Service can improve this habitat by land classification, possibly some prescribed burning and the like, then we're all for this. But man manipulation too often in the past has been commodity-inter-linked; i.e., timber production.

Hope this does not involve increasing timber cut to gain coordination on 22.5 million acres. Assume closing many roads after logging would be achieved.

If abuses of land use are corrected or limited, habitats will improve. Saving a broad spectrum of species is more important than artificial preservation of a few.

Work with other Federal Agencies on all problems. We need more coordination - State and national and county. I do not see this mentioned in plans.

We must bring into this concept of habitat improvement the controversial idea that animals do not exist to be murdered by man.

By far the most overall effective practice, is improved wildlife habitat through coordination with other management activities. This is a form of intensive management which should be given more emphasis. This could be even more than the 22 million acres, and with very little direct costs. This would be an example of management for integrated values. Incidentally, where do all the decimals come from in this report? Lends an aspect of accuracy which is not present.

Extreme care should be taken when deciding how certain areas will be improved for fish and wildlife habitat. Each improvement action should be decided on a case by case basis, rather than regionally.

As a believer in the U. S. Forest Service, I want coordination with wildlife on every acre! Then there will be multiple use.

Management. I strongly urge that you pledge the development of a wildlife management program for every Ranger District. This pledge should indicate that a plan will be developed, and that management activities will be organized to achieve stated objectives.

Habitat Improvement. I assume this activity involves habitat management on areas where wildlife is the predominant use. However, my interpretation may be wrong, and I suggest that additional clarity is needed.

Without additional quantification, it is most difficult to interpret this activity. I only know it will involve treatment of from 0.9 to 1.2 million acres in 1975-79. No intelligent comment can be made on this until the intensity of treatment is indicated. Does this include such habitat improvement as leaving Osprey nest trees? If so, I can imagine that a million acres could be included for that activity alone. Or, on the other extreme, one can imagine that a million acres might be devoted to management of the Kirtland Warbler by use of intensive habitat management. Unless some hint of the intensity of management is given, the quantitative figures are of little meaning.

Less attention should be paid to deer, and more attention should be paid to protection and enhancement of predator habitat to encourage ecological balance.

Don't see that much difference between 1.4 million acres of habitat improvement on private lands and 1.6 million acres. Looks like the U. S. Forest Service is going into the wildlife extension business, regardless of alternatives recommended. Likewise for the .9, 1.0, and 1.2 million acres federal land habitat improvement alternatives. This part I like, however.

Wildlife management techniques should not interfere with the normal balance of nature to any great extent.

X X This resource has been given only token recognition. The high level is not extreme because the present level is ridiculously low. Also, there are few trade-offs in a high timber and wildlife program.

X X Many of the key big game winter ranges in the West are being subdivided for second homes. Winter ranges on the National Forest must be improved through intensive management and reduction of livestock grazing permits.

Endangered species deserve special attention, but here again the preservation of the habitat should be the key.

Many species are endangered, so this phase of land management should be brought up to its highest standard possible.

Endangered species need "improved habitat" chiefly by preserving undisturbed ecosystems through wilderness and other designations. A wide range of ecological types should be represented in natural preserved areas.

X X There should be more emphasis on identifying habitat and habitat needs for threatened and endangered species.

Protect the spotted owl.

Must categorize one rare endangered species, protecting the important ones where protection methods and techniques are known, and allowing others to die off if that is to be their fate.

We do not believe that habitat should be maintained, restored, or improved just for those species "in greatest danger of extinction."
(Pages VI-34 and A-7)

Any reduction in species diversity through extinction, results in an irreplaceable loss from the total gene pool.

Identify and fully protect all endangered and threatened species, with severe penalties for all first offense cases.

I believe that we should increase game habitat as much as possible, because the number of individuals hunting and fishing are increasing with every year. I am not in agreement that we should earmark even 110,000 acres minimum, or a maximum of 400,000 acres, to protect endangered and threatened species. In New Mexico, there are several thousand acres earmarked for protecting a salamander. I dare say that someone could justify that every species of fish or wildlife could be construed as an endangered species. If this philosophy continues, there will be tremendous areas which will be taken out of the form of revenue-producing lands.

Applaud your efforts for the Kirtland Warbler (VII-24), the Brewer Spruce, and similar endangered species.

Page V-3. The "special emphasis on threatened and endangered species" is laudable. However, special emphasis on DIVERSITY should also be a goal.

X X We should at least maintain our current level of outputs with added emphasis on threatened species.

X X The expected side benefits should be observed before a massive direct program is undertaken; endangered and threatened species are an exception.

X X We should not be in the business of trying to fill game bags and fish limits. Manage for stable populations and to protect and bring back endangered species.

Much more needs to be known about the endangered and threatened species and their habitat requirements. More emphasis should be placed on research. We may be over-reacting in protection when there is inadequate species inventory data and habitat requirements.

We, in the Flathead--Northwestern Montana--have a lot of rare, endangered species residing on National Forest lands; i.e., grizzly bear, elk, mountain goats, mountain sheep, wolverine, mountain lion, west slope cutthroat, and dolly varden trout, etc. We feel that for the most of these above-mentioned species, a wilderness or near-wilderness condition is needed.

Hopefully, National Forests can work compatibly with the Izaak Walton League, Audubon Society, and the Wildlife Federation in regard to endangered species. How can the mining and cattle interests be encouraged to assist in this area too?

If we are going to save wildlife, fish, and rare or threatened species, we will have to stop the Forest Service programs that are destroying roadless areas today.

Doesn't the Endangered Species Act of 1973 require that endangered and threatened species be given special consideration on all National Forests and National Grasslands?

To increase carrying capacity for unwanted wildlife species (Douglas Fir region), is poor management. Minimizing the difference between desired species levels and actual supportable species mixes seems a more functional index.

Hope for stronger laws and more strict enforcement concerning trapping, hunting, and poisoning of predators on rangeland. The loss of limbs to eagles is a fallacy, and the protection of eagles, wolves, etc., is of the utmost importance.

Strong protection will be provided for rare and endangered species by not allowing further decline, and by attempting to increase populations whenever possible.

Build in at least 60 man-years of assistance to States in Northeast regions to provide information to private landowners. One-tenth as much needed in Northeast.

Push for "Acres for Wildlife" programs with woodland owners.

Technical Assistance. Who needs it? Certainly not many small private owners. They have no major motivation to improve habitat, and if they do, the States already have technical assistance programs that meet most of the needs. If the Forest Service can subsidize habitat improvement on private land, that is one thing. Simply standing ready with technical advice is not realistic!

Would favor area of wildlife habitat improved through assistance on non-industrial private lands.

XX Assistance should only be given to those woodland owners who allow public access to their lands for recreation.

There is not enough difference between the moderate and high supply alternatives for proposed assistance to woodland owners to justify the higher level.

XX I believe the assumption that big game hunting can be increased 20 percent per decade is unrealistic. We will have to work to maintain present levels.

More than 30,000 fur animals are trapped annually in the United States, and these tremendous quantities of furs are not enough for meeting the demand.

XX National Forests are becoming increasingly important as more land is taken out of wildlife production, or is unavailable to hunt.

XX Game and non-game species should be separated in the calculations. Supply of game species could be adjusted to the probable hunting and fishing pressure. Important of non-game populations would be relatively high, even with lower human populations.

XX I am disturbed by out-of-State fees some States require for National Forest hunters.

Would look askance at any federal licensing for hunting or fishing on federal lands.

In an age of unprecedented food supplies, I question the need of habitat improvement of fish and game to benefit the questionable "needs" of the weekend warrior in the pursuit of sport--endangered and threatened species being an exception with regard to habitat.

Can see no way that big game hunting can continue to increase in numbers as the land base on which it can reproduce is decreasing.

Another area of regional concern important to this Respondent relates to the anadromous fish runs in the Pacific Northwest and Alaska (EPFF IV-13, IV-14). These runs are important to both sport fishing and commercial fishing.

Hunting in the wildernesses should be discontinued in order to help restore as much of the natural wildlife balance as possible. Fish stocking in the wilderness areas should be discontinued. This would reduce use by people not interested in the wilderness experience.

In this area, South Dakota, our big game population has become burdensome (to range) and needs to be reduced to protect the feed supply on federal land and private lands adjoining forests.

X X There should be some emphasis on cooperative agreements with the States for wildlife management activities on National Forests. For the most part, hunter license fees support most State wildlife agencies. Why shouldn't some of these dollars be spent on the lands where a fair share of the hunting takes place.

X X The present trend of fee hunting on private lands, combined with increasing cost of hunting and fishing licenses and equipment, will turn the sport into a rich man's pastime if government lands are not developed to lessen the cost to those who own no land.

Emphasis should be placed on coordinated use instead of dominant use expounded by wildlife management groups or agencies. It will ultimately be necessary to control game numbers consistent with other uses, and limit hunting permits consistent with safe carrying capacity numbers.

I see no reason for maintaining herds of wild horses gone wild. Why shouldn't people harvest them as we do with wild animals?

It would be a lot easier and cheaper to maintain Fish and Wildlife levels by restrictions, hunting, and fishing. More plentiful supplies of fish and game only bring in a bigger flood of hunters and fishermen, so soon you are right back where you started from.

Hunting and fishing are valuable recreational resources which need accelerated habitat improvements programs coordinated with other land management activities. Emphasis should be placed on coordinated use instead of dominant use expounded by wildlife management groups or agencies.

Since the U. S. Supreme Court ruled (1896) that wildlife belongs to all the American people, all Forest Service wildlife and fish habitat Resource Systems and Research Activities should be undertaken in cooperation and coordination with other Federal land and wildlife agencies, as well as State and local agencies dealing with wildlife habitats.

X X Forest Service should coordinate these activities with U. S. Fish and Wildlife Service and with States.

X X Forest Service work in this field should be brought up to the level of State programs. Forest Service should have stronger voice in fish and game management.

X X This is the "poor orphan" of the Forest Service. As a Forest Service wildlife biologist, I can speak with expertise on the subject. There is virtually nothing left to do that is fruitful, productive work. This is very discouraging. It's a constant job of playing "catch-up ball." And with all the day-to-day coordinating and land use planning jobs, it's difficult to make any progress. I urge you to consider this alternative

(high supply option) as a minimum. It seems very conservative to me. I feel we need much more than indicated to keep our heads above water.

As I understand it, there are about 166 million acres of National Forest lands. On page VI-19, under the high supply alternative, 1.2 million acres will be improved for wildlife habitat. This represents 0.8 percent of the total National Forest lands. This again shows the low regard the Forest Service has for wildlife.

X X The number of activities (lack of) listed under this system give the impression that it is of little importance when compared to the other systems.

Wildlife resources should not just be "coordinated," they are an important resource on their own.

Wildlife management, including fisheries, is one of the poorest conceived programs in the National Forest System. We do not need "coordination" of wildlife as stated in EPFF, what is needed is protection and improvement.

Our wildlife and fisheries are important, but should receive less emphasis than other phases of the National Forest program.

Program does not discuss road and trail maintenance funds and possible cooperative funds to help with hunters and fishermen's share of road maintenance.

You should recognize that road building can have very adverse impacts on some big game habitat, for example, Rocky Mountain elk.

X X Until we get on top of road building and its attendant problems relative to siltation, I think we will do a lot of talking and do nothing of practical worth. Wherever roads are part of other resource systems, they must relate to this one, and we cannot emphasize too much the necessary coordination.

X X This can be done with a high and moderate program if roads are closed after harvest, and thereby reducing recreation to a low.

Less monoculture of conifers, or at least more interspersed uneven-aged, mixed stands for wildlife use, coupled with more careful attention to saving den trees and most trees, even in good conifer stands.

On page VII-22. "Good soil and water management usually provides suitable wildlife and fish habitat."

The use of off-road vehicles (ORV's) on Forest Service land is predicted to double by 2000 (IV-9). It is not explained how this prediction is arrived at. Since ORV damage to wildlife and vegetation is now well established, Forest Service policy should be to control their use, rather than to treat it permissively.

X X Good quality land, timber, water and range management, with modifications in some instances, will, in itself, protect and enhance wildlife and fish habitat. The greatest benefit that we could provide wildlife and fish populations in Appalachia at this time is to encourage stronger game law enforcement by the States, and to recognize wildlife habitat needs.

Improved habitat is a side benefit from range and timber resource improvement practices, particularly where timber thinning projects and range management practices are implemented. Consideration should be given to the high ratio of predator-prey relationship which warrants a moderate to high level of activity in predator control, particularly coyotes. Intensification of control measures if control methods are badly needed.

X X This system is so interdependent on other systems that I hesitate to pick a preference. The supply should be as high as possible commensurate with production of goods necessary for the nation's needs. Hunting wild game in large numbers may be a luxury we can't afford in future years.

X X To be compatible with other resource uses, I don't feel we can increase too much headway here. We must do a much better job with what we already have. Previous systems also benefit the fish and wildlife programs because the timber and range programs open up more areas, and the recreation program does not infringe much more.

Control predators, manage livestock allotments properly and you have more game. This may seem like oversimplification, but is the truth.

IV-13, IV-8, VI-18, Wildlife and Fish Habitat Resources. In the Pacific Northwest, mountain streams provide the habitat of migrating salmon as well as native trout species. Much more could be done in forest practices to preserve but for strips for all streams, large and small.

Insufficient information provided to make responsible choice. Expand this system to include inventory and assessment of fish and wildlife populations. Also set the stage for inventory, management, and protection of endangered and threatened flora and fauna. Identify representative cover types or critical areas for Research Natural Area System.

The success of managing National Forest watersheds can often be interpreted by the well-being of native fishes such as trout and salmon (in the West).

Non-Game Species. You have come a long way, but your emphasis is still too much oriented to game (and especially big game). This is a clear responsibility, and an area of concern on most National Forests.

In this connection, I very much doubt the estimate that big game hunters will increase 20 percent per decade (page IV-8). Many of us in the wildlife profession believe the numbers will not increase at that pace, and may actually decrease.

If we want anadromous fish migrations to continue, we must give this single resource special attention.

The loss of our seashore estuaries could have grave effects because of their great productiveness.

Under high option, we have much agreement and support on intensive management for fish and wildlife, because it is thought to have better balance of nature the human population will be more secure.

Wildlife is one of our most valuable resources, and the American public must be educated to the fact that wildlife cannot survive without habitat.

The present options seem to concentrate on game animals or threatened species, rather than emphasizing total wildlife biota. Data is insufficient to guide "improvement" for total wildlife, as most research focuses on game populations.

Support the research of economic and ecological responses to more intensive range programs, plus assistance in the identification and elimination of exploitative grazing. Also, we need a good revegetation program.

Disapprove of game management at the expense of certain non-game animals, such as predators of the game species, and of plant species which serve as food for the game. Place emphasis on research of overall ecosystems.

- X X As the rural area decreases, this is going to play an increasing role in management.
- X X The expansion of wildlife habitat must be gradual if game evaluation is to keep up with it.
- X X Does coordination with other resources mean no money specifically for wildlife habitat improvement? If so, correct this deficiency. There are only 300 M acres difference between low and high for habitat improvement. Is this a true picture of the needs on National Forests?
- X X Most forests don't even have a habitat and animal inventory - partly because we have relied on the States.
- X X We should be stewards of wildlife, not always takers. Management should not be devoted exclusively to increasing quantity of game, but rather to help restore and maintain natural biotic communities.
- X X This system has been neglected in the past. Because we know so little, we should deemphasize habitat improvement, emphasize inventory and assessment.

Southeast Alaska is one of the few areas remaining in the Country where natural undisturbed fish and wildlife habitat systems can be protected to perpetuate naturally high fish and wildlife values. A substantial program is needed to ensure that we do not unnecessarily degrade these resources.

Predators should be restored wherever possible, including both large carnivores and fish to control porcupines.

The upland bird population would benefit from a stronger predator control program on national lands.

Predators should again be encouraged to return in numbers to perform their role in population control. This applies to large species (mountain lions, eagles, wolverines, etc.) as well as the minute species which prey on potential forest pests, but have been subdued in some areas by insecticides.

Program does not discuss animal control, both predator and non-predator.

The National Forests must provide a habitat preserve for our vanishing wildlife. Accordingly, whatever uses are made of our National Forest lands must not jeopardize the existence of the wildlife.

Oriented too much toward fish and game developments, and not enough towards non-game values

Building of salmon runs in Alaska is all important. More natural gravel rearing beds needed.

We submit that the tremendous areas of Tongass and Chugach provide such an important commercial fisheries habitat that special attention should be given this in EPFF and the proposed research program.

Improvement does not mean dredging natural streams to make free-flowing rivers stocked with game fish.

We are not thinking so much of construction projects, but of management practices which will minimize harm to fisheries and wildlife habitat.

In some cases habitat has been destroyed, and improving it at a cost benefit ratio of 1:1 seems quite reasonable.

This system is extremely important in the Pacific Northwest where most U.S. Forest Service land supports river systems that contain very valuable runs of anadromous fish, especially salmon and steelhead. In some watersheds, the fishery value may be far greater than the timber value.

Balance attention between "game" species and all other.

First priority should be given to protecting the remaining wildlife habitat from domestic stock overgrazing.

(X) There is a vast shortage of knowledge in meeting fish and wildlife needs with production of wood and red meat...

Page VII-23, "The benefits of water developments to wildlife would be greatest at the high supply level" is not a true appraisal. Establishing a mini-wetland habitat and inviting waterfowl to a dry prairie is not necessarily a beneficial wildlife program. The adverse impact of increased domestic stock use will deprive big game animals of sustenance that they formerly enjoyed without competition.

Recommend that range improvement programs do not include spraying of sage browse. Sage hens, deer, elk, and other using wildlife will be reduced in numbers if spraying is used.

Widespread spraying to defoliate should be banned.

Under no circumstances should widespread poisons be allowed.

Wildlife and Fish Habitat Resource System must also include non-game species. Discuss effects of monoculture, chemicals, etc., as inputs into this "system." Do same for alternative timber harvesting systems for relative compatibility. Give special attention to clearcutting and "size" considerations.

When I was an undergraduate, the cliché was "Good Silviculture is Good Wildlife Management." The Forest Service does not really believe that, so why do you continue to repeat such ridiculous nonsense. I doubt that any wildlife agency is saying that good wildlife management is good timber management (or water management, or soil management, etc.)

I would urge that the Forest Service's wildlife management activities shift as quickly as possible to an ecosystem approach to their subject. How many acres of "habitat improvement" under any of the alternatives will be created by logging operations?

Studies should be initiated to determine the type of forage needed, and then possibly a reseeding program started.

Avoid undue emphasis on game species. This alternative acceptable only if habitat management is not too bulldozer-oriented, too heavy handed. National Forests are not, and should not be, game farms. Do not use wildlife production to justify timbering.

Two basic approaches to the problem are suggested: (1) Many more no-cut areas need to be identified, set aside, and subtracted from the sustained yield timber acreage in order to protect naturally high value fish and wildlife habitat systems. (2) The remaining cut areas need to be intensively managed with buffer zones, strict harvesting techniques, and stringent enforcement procedures to ensure the maximum protection of fish and wildlife systems while still permitting maximum sustained yield forest management procedures.

The greatest need and emphasis should be on the protection of wildlife and fish habitat. There needs to be a stepped up program to clean up damaged streams and estuaries. Most important is to stop the destruction of habitat through clearcutting activities.

Pink and chum salmon spawn in intertidal areas as well as in streams flowing through forested areas. Effects of logging in intertidal areas would be different from upstream areas. Furthermore, pink and chum salmon young move to the sea immediately upon emerging from spawning gravels, and therefore can avoid many logging effects upon the stream habitat. In contrast, other species of salmon, primarily coho and red salmon in southeast Alaska, as well as trout and char, need fresh water rearing habitat for one to two years after emerging from the spawning bed.

Forest Service's policies in Alaska (such as in timber sales contracts) to protect salmon production have not been demonstrated to provide protection to salmon production. Changes in the heat budget, increased potentials for wood debris to enter the stream, and many other factors have an unknown combined effect upon salmon production.

The test, if spawning areas are adequately protected, should be based upon whether the outputs of salmon and trout from an area unprotected by logging protection clauses have not been adversely affected.

X Y Conflicts with timber and range programs have not been realistically evaluated.

Restructure harvest contracts to assure the enhancement of fish and wildlife resources and to assure compliance with the "Multiple Use Act."

X Z Special effort must be made to see that expenditures here are not negated by increased timber production, particularly in sensitive lands.

We were under the impression that the Forest Service did that (and was mandated to do that by the Multiple Use Act) on all acres. Please clarify how the proposals differ from what you are already supposed to be doing, and claim to be doing.

X X Believe National Forests should be managed to produce good fish and wildlife habitat so that the public can enjoy this type of recreation. This must be done within multiple use guidelines.

A commitment significantly greater than described under high option is recommended to achieve the intent of the Multiple Use-Sustained Yield Act of 1960.

Maybe more thought should be given to man changing his activities to suit nature, rather than the other way around.

Some of our most destructive projects have been done under the guise of "enhancing fish and wildlife."

The title of this system should be changed to "Biological Resources System." The Forest Service should give much more attention than it does to the whole picture of the flora, the fauna, and the biotic communities of the National Forests--indicators are that there is not only a general lack of knowledge, but that what knowledge there is, is in terms of consumptive exploitation.

Critically concerned over more winter grazing areas.

Serious consideration should be given to the increasing non-consumptive use of wildlife, such as observing. Attention should be given to non-game and non-threatened wildlife population in forest and urban ecosystems.

X X As long as the U.S. population continues to rise, and our noisy concrete-laden cities expand into rural areas, money spent to improve habitat for fish and wildlife is generally a temporary stop gap and eventually wasted when the rural areas that it is spent on are swallowed up in urban developments. Therefore, I feel this has low priority compared to money spent on water, timber, and range resources.

Program does not discuss various inventories needed in order to meet program objectives.

X X With the money demands being so intense everywhere, I believe that first priorities should be spent in areas of essential life-sustaining needs.

Contract work. Keep staff minimums.

Harvest contracts to assure the enhancement of fish and wildlife resources and to assure compliance with the "Multiple Use Act."

The nation should put its investment in wildlife into the National Wildlife Refuge System.

X X Has been neglected to some extent compared to timber, but is not as high a priority as soil and water.

X X There seems to be a real opportunity to identify work in this system that could be accomplished by human and community development activities.

When harvesting timber or other work, plan for wildlife when finished. Increase funds for research; do not apply to wilderness areas; no reservoirs; inform public and manage clearcuts for wildlife benefits; prevent fish habitat deterioration through erosion of watersheds. Protect endangered species and large predators (bear, bobcats, cougar) regardless of State laws, encourage hunting of deer and small game.

Much has been written, but little done, about improving habitat. The money goes to pay salaries of specialists to write plans.

Even non-endangered species need all the help they can get to survive, let alone increase.

XX We need to know more about wildlife habitat needs before we proceed.

It is entirely possible that some species of plants and animals may disappear as a result of man's activities. The advantages and disadvantages must be considered in light of our human needs, and a decision made accordingly.

One of the specific resource demands omitted from the section is the production of fish and game for subsistence uses. In Alaska, such uses are still very prevalent, particularly in the isolated native communities.

A range "wilderness" ecosystem set aside to preserve that segment of history for future generations.

XX We are losing our game range to land development in many areas. Strong action is needed now to save what we can.

On page A-5 and A-6 mention is made regarding the "protection" of wild horses. The statement is made that the Forest Service has been "charged" with their "protection, management, and control." I hope that the "protection" of the wild horses in Idaho is not indicative of how the Forest Service plans to meet their "responsibility." I do feel that the manner in which the wild horses in Idaho were treated does indicate that the Forest Service still has the attitude that the only things that count are cutting more trees and grazing more sheep and to hell with everything else.

Wildlife and Fish Habitat Activities: "Management prescriptions" do not "adequately protect spawning areas" in Alaska. This is obvious in the comments of fisheries biologists who review the Environmental Impact Statements on timber sales in this area.

There is a tendency to give every consideration to what are considered to be endangered or threatened species of animals (hopefully plants). Equal or greater concern should be given to the prevention of additional species being added to such a list.

Direct habitat improvement has only been paid lip service in the past, unless it was a secondary consideration in other land management activities.

There is a finite amount of wildlife, for which the State seemingly will sell an endless number of hunting licenses... We need to consider limiting the number of hunters as well as maintaining or increasing the available fish and game.

Page IV-14, lines 1&2. It's necessary for more than fingerling survival. Clear cool water is necessary for the eggs to be laid and develop too.

RESOURCE - Human and Community Development System

- X X Youth Conservation Corps is a good program but presently too small to benefit the needs of the young people--need more camps. Environmental Education becomes more important each year because of expanding complexity of resource management. People need to understand.
- X X Although the high alternative is needed, we must recognize the factor of physical facilities available for the expansion of such programs as the Youth Conservation Corps. The administration apparently understands the importance of such a youth vocational program since the bill making it permanent (\$60 million) was passed recently. Some of this must surely be intended for new construction of facilities. Few of the present facilities can be expanded.
- X X The YCC program has proven to be very effective in getting work done and also in giving meaningful instruction to youth.

To give youths an opportunity in the job world is commendable, but will it prepare them in case in this job would be taken over by professionals in the field.

- X X Expand Youth Conservation Corps, including trade training that is now readily marketable. Restrict Rural Development program to those youths whose gross income is at the national average or below.
- X X Direct the Youth Conservation Corps programs to correcting problems existing in the land and water resource area.

Increase the Youth Conservation Corps and other labor programs for construction of shelter along trails into remote areas.

- X X The need is obvious for more young people to be doing more useful things with their heads and hands. Labor intensive practices need to come into use, rather than capital intensive practices which cost more in terms of fuel and investment dollars. We need to train people to work with their hands, even if it's packing thinnings to the roadside for the public to use as fuel. Let's get back to basics with youth programs, which may mean hard manual labor in producing fuel wood, replanting forests or restoring rangeland.

Think that a youth conservation corps is good. Think that there should be more positions in the Forest Service for the many graduates in wildlife, fisheries, ecology, and natural resources management. And I think that more Forest Service personnel should go back for continuing education in aesthetics, ecology, and geography.

Organizations such as the YCC serve in important ways but their role can be overdone in some areas and they do not represent permanent rural employment. Perhaps we need more incentives to bring people back to the small farms instead of the forests.

The Job Corps Program, Operation Main Stream, and Youth Conservation Corps may, in the next several years, prove (if conducted on high alternative level) to be not only a beneficial measure to the environmental and natural resources, but a means of fighting the increasing rate of unemployment, especially among our young people.

Youth Conservation Corps orientation toward sophistication in quality and goal achievement with desophistication of construction techniques and materials.

X X It is hoped that youth conservation programs will tend more toward the old Civilian Conservation Corps concept than the Job Corps idea. In other words, I don't think the Forest should get too involved in sociology. Especially when it comes to our expending large sums of monies attempting to teach youth the education they should have learned in school and moral disciplines they should have learned at home. Our youth program should, instead, be oriented toward accomplishment of productive and interesting work. If the youth enjoy the outdoor work they're engaged in, many social as well as technical educational values can be learned on the job.

In view of current economic trends and proposed Presidential programs, it would be wise to direct Federal energies toward the expansion of the Youth Conservation Corps and Manpower Training Programs. Perhaps some of the funding for environmental education could also be directed toward increasing employment opportunities. Expansion of rural development programs will forestall the rural migration toward urban centers.

The EPFF's "Human and Community Development System" takes on increased importance during this period of growing unemployment and inflation. However, EPFF must reflect communication mechanisms with which to inform and involve youth, minorities, and other affected groups of opportunities available under such programs as the Youth Conservation Corps.

X X Need to provide more jobs for college graduates in forestry, perhaps through YCC.

Youth Conservation Corps: Should not be tied to a specific set of statistics, but to what the social-economic needs of the community, state, Region, and Nation require for employment opportunities in any one period (2 years?) during plan life. Should follow period need, not an over increasing free area camping trip. Have placed in "moderate" area in belief that long term plan "need" will average in this area, but it must not be locked into this statistic.

X X With YCC program being approved by Congress, and expected increases in number of programs I feel we should absorb this impact and analyze its strong and weak points before further expansion. On the local level its impact is that of annual expanding and contracting organization to gear up then stand down each summer. The program constraints place certain limitations on types of work and training that can be performed and there may be a saturation point on what the organization can handle.

Immediate emphasis should be placed on educating our young people in conservation areas, and in proper use of both renewable and nonrenewable resources.

YCC should attempt to reach out to all youth not limiting itself to disadvantaged youth.

Youth, through education (on all 6 subjects herewith) is our only hope for the future of America.

We do endorse work corps for forestry service. Youth can become reliable citizens through such work. Unemployed can become taxpayers through such a program.

Bringing city youth to nature is in itself important and a seedbed of future information.

The Youth Conservation Corps could be much improved if organizations such as the Appalachian Mountain Club could be used to help train the young people.

Youth Conservation Corps has been a big success but it is destroying older "farm kids forestry camps" that charged fees.

There should be no large work parties or camps set up within any wilderness areas.

X X I'm not really familiar with many of these programs. The Youth Corps Program has been successful, I understand. Rural Development programs that I have seen have been disappointing. I believe that generally our expenditures are more productive in the various resource functions. A strong look should be taken in our participation in State and Private Forestry in the West and such activities as Civil Defense.

X X I would urge that professionals with "people skills" be brought in to administer these programs rather than leaving them in the hands of people who are primarily trained as foresters.

More people learning to care about ecology, yes, more education on ecology especially in public and private schools and colleges. More ecology organizations.

Extend the I&E branches through offerings in; a) community colleges, b) public school from intermediate to high school, and c) reaching families and interest groups by adult education.

Environmental education should include instruction or, better, field practice in the use of trails, camp sites, shore lines, etc., to protect environment. For instance, no trail cutting! Most thought on this subject is that it is best taught in outdoor classes with field activity or by visual means such as TV programs. People do not respond to the safety angle or to oral or written admonitions.

x Environmental education should be placed under VIS. This would allow more efficient use of visitor centers and VIS personnel. Many of the efforts of VIS and EE are duplications. If EE was placed under VIS more efficient use of the VIS dollar could be made and other EE dollars saved.

While I deem environmental centers important, I am afraid that some people in the Forest Service may think that the "best" way to teach environmental education is to lift the student from his home surroundings and transport him into a forest. To balance this viewpoint, one should visit the Ann Arbor, Michigan Environmental Education Center. It's right in the heart of the urban environment and as such articulates more meaningfully with the home environment of most visitors. But no question, interpretative centers on National Forests can offer substantial, specialized environmental education learning experiences. Let's be realistic, however, and not try to use these centers for EE activity that might well be conducted better elsewhere. Pristine natural environments are usually remote from population centers and the real-world environmental problems of an urban society.

In-Service training is a crucial need and I sincerely urge greater participation by the Forest Service in this activity. The workshop format should be exploited to its fullest for several reasons: (1) Relatively low cost for number trained. (2) Multiplier effect--train instructors--instructors train teachers--teachers train more teachers--teachers provide learning experiences for students. (3) This program is designed to make use of professional expertise within and outside of the Forest Service.

Certainly publications should be updated and I prefer two broad suggestions: (1) Apply the principles of instructional technology and think in terms of print and non-print media formats. (2) There is a lot of duplication of effort. I think it might now be both educationally and politically expeditious for some interagency coordination in producing and distributing environmental educational materials. Perhaps a Forest Service goal ought to be the initiation of an inter-agency task force.

It is our firm conviction that getting the specifics of clearcutting, range management - and recycling projects - before the public would engender the support needed to obtain essential funding. Not to mention our pet--the innovative educational value of your Environmental Education Workshops. Not only did their hard work, enthusiasm and know-how have a tremendous impact but their warmth and graciousness paid big dividends in many tangible and intangible ways.

I encourage you to consider television production in cooperation with whatever public or private sources of environmental expertise are appropriate and with the U.S. Office of Education who can offer expertise in educational process or can doom efforts that circumvent them!

X X Providing services at this level (high) is necessary. The program must, however, be oriented toward environmental education and getting on-the-ground results from groups like the YCC. Running a social rehabilitation program or delinquents or bums should not be allowed. If done right the program will do the most to develop the moral fiber and spirit of the nation. Also long-term understanding and support of conservation and the Forest Service will be created with these programs.

X X We need to update our ways and methods so that people can cope with the future through sound educational ways.

To establish environmental education centers on Forest Service land, it will be necessary to develop much more information on the natural history of those lands than we have now.

There is no mention of environmental education research. Perhaps it will be argued that this is not in the purview of the Forest Service. I would argue that it is: if we should research social and social psychology factors in order to better structure our recreation program, we should certainly do not less for our environmental education programs. Again, interagency cooperative research programs and grant or contract research might be best.

Even the "high supply alternative" in environmental education seems minimal. At best, far less than one percent of the teachers in the country would receive the training program.

The environmental education of the Forest Service is one of the most important facets of Forest Service today.

X X Environmental education would assume a proportionately higher value with the high supply alternative as the ratio of urban to rural uses increased. Conversely, rural development requirements might be proportionately less.

X X This will allow us to get direct involvement in local community activities.

Let me state emphatically that the Forest Service has been a leader in environmental education. Some of the best publications (print and non-print) and some of the most innovative methodologies originated with the dedicated and competent environmental educators in the Forest Service. But, despite the extent and quality of these contributions, my observation is that EE efforts by the Forest Service have always been somewhat stymied by: (1) inadequate staffing, (2) minimal budgets, and (3) low priority in program planning. "Missionary zeal" more than "job responsibility" has been responsible for the successes charted to date.

Work to phase yourselves out of this area. This is for our school systems and for private enterprise.

Unless emphasis is changed, I am opposed to the continued use of Federal funds to propagandize the public for Forest Service programs. There is too much emphasis on this phase of the "educational" program.

X Efforts in environmental education are considered of less ultimate value to the public than the actual employment of youth enrollees in productive programs. Increasing efforts in the school system on environmental education tends to decrease the need for an increasing effort in environmental education by the Federal agencies.

X People are the key to this whole program. The program serves the people by serving the land because the land serves the people. People are needed to accomplish the program and the job it provides may turn out to be an end in itself.

Environmental Education: The greatest misunderstood, misused, abused area of information in the "forest" sector in recent years is "what is the relationship and needs of forest activities (particularly harvesting wood fiber) and the environment. Providing the teaching is done by "broad forest management" oriented professional foresters and provided the economic relationships of forest management to environmental issues is a mandatory part of the educational process, we recommend the highest sustainable level of "Environmental Education" possible.

The environmental educational program, if properly conducted and developed into acceptable TV programs could substantially decrease the environmental land-use conflicts confronting this Nation. Many people do not presently understand resource management principles and techniques and as a result they have a negative approach to forestry programs.

X X The human species is endangered also, so any program that can make lives more meaningful should be encouraged.

Hooray for the Environmental Education Program! I hope that the role of fire will be explained in realistic terms e.g., that fire is not always bad, but sometimes naturally beneficial to the flora and fauna.

As to Human and Community Development System I believe you must educate the general public to take care of what they have in the National Forests; teach them not to befoul them with debris from their camps and hikes; not to burn them through carelessness; not to ruin them and the lovely things in them by a web of roads and motor trails. Believe me, you can never work with the public unless they will work with you, and that will take education and stringent rules and penalties.

This is the key to public understanding and acceptance of good National Forest management. I agree that 3,200 Forest Service employees need re-educating but probably do not agree to the topic selection.

Rural development connotes a bad thing in my mind. Eventually we will run out of rural areas to develop. The environmental improvement part of the program sounds good but the business and industrial development figures sound too high.

I see the need to reverse the trend toward urbanization by creating rural employment but do not want to see overdevelopment of the National Forests, especially Wilderness Areas, as a way to achieve it.

Am not sure rural development is an objective of a National Forest.

Why do we have to develop business and industry in all rural areas?
Why can't rural America stay rural so people can choose a life style?

X X Effort should be made at Washington Office to get welfare recipients into a program of this nature to earn their payment.

X X It's about time the Federal Government stop giving so much and people stop demanding so much from Government. This is not a socialist country but a constitutionally free enterprise republic. Supporting the low level will be plenty and a good start to stop the Federal growth in social programs.

X X We get advice to help local people by employment. The suggestions listed aim at new programs. We have five men on WAE appointments that could use permanent full-time employment. This would be a more stabilizing program than any of those suggested. When we are forced to put these men on their part-time tour it reduces them to below poverty level income. Do something for the many loyal technicians instead of instituting new programs.

There is no discussion of plans for Environmental Health Program to protect visitors from communicable diseases transmitted by vectors, animals, or contaminated water.

X X For the most part, rural development programs appear to involve duplication among government agencies.

Rural development technical assistance should be coordinated with state, regional, and local planning bodies.

X X One thing we must remember is that tax dollars will buy more at the lower end of government than those coming from the top. Any Federal program of assistance should be set up as a technical assistance, guideline, or monitoring program, or a combination of these type programs, and implementation should be at the most economical level of government.

Get the foresters out of their overstuffed chairs, their slick offices, and out on the ground where they can help rural people provide support for the National Forests and make a living without destroying forest values in the neighborhood.

Such activities as on page 19, "Rural Development" and "Environmental Education" cannot be endorsed at any level because they will ultimately impose uniform "solutions" originating in Washington on local, diverse problems which deserve individualized local attention.

And for increased emphasis on rural development--to keep decentralized structure intact while insuring secure incomes.

(X) We probably have the greatest opportunity to give to America in this area. It can help immeasurably to improve our welfare problem. But in addition to the goals stated, we need to hire specialists in this area and we need significant financing.

In contrast to "community planning and development information and services for rural areas" what we are seeing in Southeast Alaska is is policy directed toward destruction of the way of life of people in small communities who find themselves in areas where the timber has been sold to large absentee owned timber companies.

Suggest that included in the technical assistance is assistance to local communities and businessmen in setting up commercial trailer and car camping facilities near to the forest so that valuable forest land can be used for more important purposes. This applies particularly in the East.

Question that all 10 activities should be included under low, moderate, and high rural development. It appears that comprehensive planning, community services and facilities, manpower and development, and environmental improvement are considered most important.

The high alternative will help the community of man.

Rural development is placed in the moderate area to show an average participation level. The participation should be based on a given area's dependence on the National Forests for its base economy. In any given community, the participation could be anything from nothing to very high, depending on reliance of the community on the Forest Service activities. Also, consideration must be given to the primary nature of the community's major economic activities. Following is a suggested priority list for main "Rural Development Consensus" from two stand-points: Forest Service Responsibility: Rural development is a responsibility only to the extent that they are the only and major economic element in a community. The Service cannot and should not try to be all things to all people, except when they are the only government agent in the community. Priorities: Without trying to justify the numerical place of each item, the basic rationale is that a viable business industrial climate should provide all or most of the services and direction needed. The government agency should step in only when no other viable alternative exists. The need for Forest Service expertise probably exists more in a "recreational" oriented community than an "industrial" community. (Government Camp-Mt. Hood vs. Oakridge, for example.)

<u>Major Activity</u>	<u>Forest Product Business</u>	<u>Recreation</u>
Priority 1:	Business & Industrial Development	Recreation & Tourism
" 2:	Health & Welfare	Health & Welfare
" 3:	Rural Cooperatives	Rural Cooperatives
" 4:	Manpower & Development	Community Services and Facilities
" 5:	Comprehensive Planning	Environmental Improvement
" 6:	Housing	Comprehensive Planning
" 7:	Organization & Leadership	Organization & Leadership
" 8:	Environment & Improvement	Manpower & Development.
" 9:	Recreation & Development	Housing
" 10:	Community Services and Facilities	Business & Industrial Development

X X Need to display activities for older persons under all alternatives.

The Forest Service should do all it can to strengthen the economy through job programs, as long as they make no irreversible changes upon our existing resources.

The Job Corps program should refocus from its construction orientation to provide training in recreation, wildlife, water and timber management, as well as some of its existing in-city training. Assistance to rural communities should be in the form of annual payment in lieu of income from sporadic timber receipts.

X X Forest Service should not try to be everything to everybody. The Job Corps program should be completely dropped as a wasteful bureaucratic boondoggle. We should not try to be a social organization, but should concentrate our efforts on protecting and enhancing the environment for the use of the public--rich and poor, black, red and white equally. That should be our social contribution.

We recommend that the Job Corps and other programs be developed and enlarged during this period of recession!

X X Present operations are based on heavy use of "free" cooperative manpower programs such as Mainstream and Neighborhood Youth Corps. This approach is fraught with fiscal disaster. Elimination or redirection of these programs into other agencies would leave the Forest Service with no budget and manpower capabilities to respond to the public demand for use of existing facilities. Priority for development.

X X Believe other manpower training programs could be doubled, as should Operation Mainstream.

X X If the country wants the Forest Service to develop humans and community, cooperative dollars as with the Mainstream program is the honest way to do it.

Also related to research: All too often research programs are designed and implemented with no thought given to the appropriate dissemination of results. Frequently research reports are highly technical, printed in limited numbers and become known only to those who make heroic efforts to discover the report or technical journal article. I suggest that every research proposal should specify all potential users of the data generated and that the project should be budgeted for appropriate information dissemination. If there is valid reason for making a film, or publishing a popular booklet or providing a seminar session for the press, these provisions should be made at the head end of the project.

Increase the quality of the environment and the quantity of job opportunities.

Am absolutely astounded by the preposterous assumption that the only human and community systems the Forest Service deals with are YCC, environmental education, and rural development. Whoever wrote this had limited vision indeed.

Dismantling old structures for salvage should provide work for suitably supervised unskilled labor if it could be removed from carpenters' union jurisdiction.

If unemployment rises above 6 percent and the new authority comes into operation, then these programs should be maintained at the Moderate and even stepped up to the High Supply level. In addition to the educational part of the program, this manpower should be used for Land and Water System projects and could be used to clean up the dumps that are appearing on forest land with increasing frequency.

Fresh air and work never hurt anyone. Judges should make this mandatory with city committed crimes--minimum pay--pride in country.

X X With memories of the Civilian Conservation Corps and its marvelous contribution to the country and persons employed, this could tie in with federal employment programs and enrich all of us.

All of our timber, water, and range resources are secondary. There is no higher use than providing healthful social and spiritual benefits to people.

X X (High) This system contains many very worthwhile programs. The benefits extend far beyond the dollar value of work accomplished by participants. The Youth Conservation Corps and other such programs should be expanded to provide greater opportunities. The environmental education program is essential to bring a conservation mentality to the public. It must be expanded. Expertise within the Forest Service should be available to help rural areas plan desirable development.

X X There should be more accomplishment of Forest Service projects and better accounting of where the money goes in the programs.

- X X Maintain the present level for the next 5 years but finance the planning effort needed to expand the program during the following 5 years to the moderate.

My personal feeling is that American people are generally not aware of opportunities available in this total "Human and Community Development System." Consequently, I feel the need exists to find and implement those communication measures which will ensure that low income, minority, and other affected groups, including the growing number of unemployed, are made aware of this opportunity.

- X X Programs in this system are very worthwhile under certain economic and political conditions. They have a tendency to deviate from purposes for which the National Forests System was created, however. Practical and theoretical results must continuously be reviewed and analyzed as to their real contribution to the Forest Service mission.

I just don't see how the American taxpayer can afford more.

One added factor. Your research could be used toward calculating "human environmental carrying capacity." This would be valuable in designing future systems.

- X X Our youth need constructive direction and that's one purpose of YCC.

Within the system there should be provision to include both the Cooperative Extension Service and State Forestry agencies.

The U.S. Forest Service should not pursue any of these activities except possibly the Youth Conservation Corps and Job Corps with other agencies responsible for such areas.

- X Let's quit fooling with this. We accomplish a lot with our regular programs, but we are not professional socialists and are not funded and never will be able to do the total needed job.

- X X Prefer to see these programs continued at the present (low) level for 5 years. At the end of that period, an evaluation of effectiveness should be made. This evaluation should indicate future direction.

- X X Do not over-build physical facilities for these activities. I don't want to see expensive buildings abandoned after a few years' use.

I think before a proper evaluation can be placed on the merits of such a program, it should be determined what those thousands of individuals that have had this training are presently doing as far as their life work is concerned. If, indeed, it can be determined that we are improving the human environment by such a program, then, of course, it should be continued. If it is not providing the desired results and is only a method of extending bureaucratic programs, then I feel that the program should be kept on a low key.

Some Rangers believe Forests should be used only by the environmentalists. This is false teaching. The whole system is improved by using multiple use concepts.

Continue human and community development systems as long as useful work is being done and as long as there are funds available that are not detracting from more important goals.

Aside from Youth Conservation Corps and Job Corps activities, I cannot find the word "education." Are any programs of education on the K-6 or K-12 level related to this report? Are any plans for presenting this EPFF report to students being formulated?

Urban and community forestry should be recognized more in the Human and Communities Resources System.

Educational Opportunities: National Forest System has done a fine job in educating many people, particularly children, which is where such important information as to fires and to litter should start. Smokey Bear is probably the greatest "teaching tool" ever devised.

Under Environmental Education, it looks like Forest Service thinks they are the only environmental authorities and are placing emphasis on training teachers. Under Rural Development, they are getting more involved in fields that may best be left to others.

Environmental education should be placed under VIS. Many of the efforts of VIS and EE are duplication.

Forest Service capabilities are at least as good as National Forest System, if not better. Environmental concerns, public concern can be met by Forest Service programs. Some years ago, I suggested that to an A.D., and was told Forest Service mission did not include educational activities.

Expanded use of Youth Conservation Corps enrollees, particularly in this area, would permit a moderate supply and balanced program.

SUPPORT ACTIVITIES

- X X We need high quality road design and construction and more hard surfacing at main roads. We definitely need to maintain what we have to a higher quality and greater quantity than we have in the past.

Road construction should be well researched and held to a minimum. Roads that are not being used should be put back into growing trees.

- X X Let's build as few new roads as possible and try adequate maintenance of what we already have. Our maintenance of roads is terrible!

I think it is an obligation of the Forest Service to discourage unneeded auto roads through forest lands, for the sake of all forest values mentioned in your report.

Reverse the growing trend of limiting public access to forest lands.

Moderate level of engineering expertise must be maintained--however, many engineers still have much to learn about sensitive soils and that there are considerations on road jobs which are more important than grade, alignment, tangents, etc.

Suggest great care be given to roads--both phasing out of old roads and building of new roads. Both old and new roads provide public access which may or may not be ecologically sound in a "master plan." Suggest old roads might still have useful functions as hiking trails, etc.

- X X We need to emphasize the work of obtaining needed rights-of-way on Forest development roads and trails for access to National Forest land.

The Support Activities Program low level does not propose road construction and is preferred over any additional road building in the alternatives.

- X X Much wilderness is becoming very heavily used; one way to prevent this may be to discontinue building roads to and trails within these areas.

Stop building paved highways into previously relatively inaccessible regions of the National Forests.

Question the adequacy of the research base for extensive type conversion. Question the need for more trail and road construction. Effort should be put into trail and road maintenance and re-location, including elimination.

Although wild fire in valuable timber or watershed areas must be controlled, it should be recognized that all fire is not bad. We spend too much suppressing fires which would do little or no resource damage.

Stop trying to control every fire. Put out fires in logging slash and protect the young plantations in the Douglas-fir region, but let it go in areas of light fuel, in the Ponderosa pine region, and on the range. Fire was the most important physical force in many of the western plant communities, and we have only screwed things up where we have systematically excluded it.

In order to save time and money in fire suppression, I urge that a fire plan be prepared for all wilderness areas with the option of letting naturally caused fires burn. By suppressing fires in wilderness areas, the area is no longer a viable wilderness.

- X More fire research and fire management studies are needed to determine areas that need to burn for fuel management, and maintenance of natural conditions.

Support studies of let-burn policies such as White Cap Creek, Sequoia National Park, Yellowstone and Glacier. Fire suppression should be reevaluated in light of need for natural or controlled burning in some ecosystems.

Spending money for fire prevention is the better approach than fighting the big ones which too often get away and do the greatest damage.

Believe that some of the funds spent for forest fire suppression could be spent more wisely. I have seen a forest fire being fought with smokejumpers, chemical retardants and all the rest--a fire that did not need to be extinguished.

Restore "Hit them hard while they are young" policy of fire suppression. Presently too much reliance on aircraft for detection and suppression. Result is late detection, slow suppression action and big fires.

In the Southwest, special emphasis should be placed upon the fuel treatment activity because of the critical fuel levels existing in many of the forests.

- X X We should include some acreage in each alternative for treatment by fire.

- X X The program that will gain us the most is increased P&M financing to cover basic fire plan needs, raise the standards and competency of Ranger District FCO's and, get atop the fuel problem.

- X X Unless there is a drastic change in Forest Service management, we won't accomplish even the low alternative in fuel reduction.

- X X Reducing fire suppression should be a major goal. Limiting funding to appropriated amounts would sharpen the efficiency of fire managers.

- X X The targets or indicator for reduction of man-caused fires and acres saved from burning are not realistic at the moderate and high alternative goals.

X X Our base fire organization has changed very little from the 1960-65 plans to the new 1975 plan. Because of cost escalation, the dollar buys less and less each year, but, the difference in cost is made up with FFF. If we doubled our FY '75 allotment, the fire organization would not change--we would simply use less FFF. How then can we increase acres saved from burning by sevenfold? The same question can be asked of the prevention targets.

X X Feel it is necessary to balance the quality and quantity of fire suppression throughout the Service. It appears some Regions have more manpower, better equipment, and the abilities to finance a set fire season while another Region does without. This not only is in-Service but also includes S&PF programs to help the various states develop their own Forestry Department to help supplement the protection load with manpower and equipment as well as effective state legislation on resource protection and public safety and forest practices.

X X Limiting funding to appropriated amounts would sharpen the efficiency of fire managers.

Efforts should be made to get rid of inholdings and round out Forest Service boundaries.

Many private holdings block the public from access to public land on the other side of these holdings. What is particularly unfair is that often the owners of the private land have exclusive use of the public land from which they exclude the public.

Management of Forest Service lands can be enhanced by intensive land exchanges to consolidated ownership.

X X It has been accurately said that in the Eastern National Forests opportunity for land acquisition may be irretrievably lost by 1985.

Pursue land exchange to get out of grass business in West and into the forest resource in East.

Acquisition of additional lands, in the name of solidifying blocks and otherwise increasing the Forest Service empire, should not be authorized unless required for very specific, limited purposes.

I am opposed to the government acquisition of land. Put as much as possible into the ownership of private individuals and on the tax rolls so the people in local government can provide the services required for a democratic system.

We are steadfastly opposed to the sale or loss of public lands, ever, unless undeniably in the public interest. We, in fact are in favor of a continuing federal policy of acquiring additional lands for public use and enjoyment.

X X If we are to avoid serious conflicts in the future, extensive land survey work is needed now.

- X Within this category, maintenance of what we already have should come first, i.e., maintaining boundary lines and corners, existing roads and structural improvements.

The more you manage the forests, the more insects and disease there seems to be. Our present management, which simplifies the forest, makes it more susceptible to these pests. Thus, a return to more natural conditions is clearly in order if we want to avoid ever more costly projects like the tussock moth spraying.

If you have to neglect any part of this, do your best to control insects and disease.

- X Emphasize silvicultural treatment in forest pest control.

Toxic materials should be used as little as possible and biological controls are often safest.

Do not support the use of chemical pesticides as a way of controlling forest pests, especially the use of DDT.

The government should invest in only enough facilities and programs necessary to get the job done. Fewer, less expensive equipment, programs, and installations can often do the job effectively if properly managed.

Structural improvement--these should not be made in any areas even remotely qualified for consideration for the Wilderness Preservation System.

- X We need to maintain existing improvement. We need to work for more equal enforcement of all laws and regulations.

- X Mineral rights administration needs expediting, plus quicker action by the Bureau of Land Management.

- X X Budgeting still flows from the top down. The Washington Office gets about \$7.80 on BF for timber and it's eroded to about \$1.90 for project work at the district level. The same is largely true for other functions. The work is still done out in the woods and that's where the financing should start.

It is impossible for us to make a decision when so many programs are lumped together in such a manner. The deciding factor for many of these activities would rest on cost factors which have not been included in this report.

Over half of the support activities should serve increased areas or offer greater service by the moderate amount of increase noted. Of the other 50 percent, about 25 percent of activities should be held at a low rate of service, and the remaining 25 percent pursued at the maximum.

None of your alternatives. Your support activities do express some concern for all of the Resource Systems; however, to categorize them into an alternative would not be giving equal consideration to all of them. Under your present proposal, certain Resource Systems would benefit at the expense of others. Your support activities are representative of a "so-called" concept of long-range planning with the emphasis on supporting goods and services.

Low Comments: These activities should not all be grouped together. Emphasis should be given to increasing knowledge of geologic, soil, and water resources; to acquiring consolidating holdings; to maintaining and expanding the trail system; to improving law enforcement.

Like to mention those areas which seem most pertinent and possibly most important at this time: Insect and Disease control, fire protection, specific information on water resource, all structural improvements, and cooperative law enforcement agreements with local agencies if this refers to controlling people's heedless usage of the National Forests.

It is questionable if the Forest Service should become involved in the management ("assistance") of grazing activities on private land. Isn't this normally the function of the SCS, Extension Service, etc.?

X X There are priority items identified in this system that should be accomplished in a high alternative, i.e., maintenance programs, trail construction. However, there are others that should be continued as a low alternative, i.e., land exchange.

It is time to acquire land in forests of low National Forest ownership in the East for National Forest purposes, especially areas with high population centers. Outstanding and reserved minerals should be acquired. All land lines should be surveyed and marked and all

property owners erected (sic). Most field offices, warehouses and dwellings in the East should be upgraded. Law enforcement agreements with State DNR's should be encouraged. State game wardens know National Forest land, the people, the areas, the backroads and are trained and highly motivated.

I believe we may improve productivity in terms of efficient utilization of L.W.C.F. in acquiring land under any alternative.

The present road system on National Forest lands is very poor. Most of the roads...need to be improved for public safety, and to control soil erosion. The new resounder access roads will be needed to meet the future demands, but the existing system is needed now.

We have enough roads at the present time. People are able and willing to walk into areas--they don't have to drive. Timber roads should be temporary once the basic road system is established. Go slow on additional road construction! In past management of National Forests (last 10 years) there has been far too much effort on goods and services like timber. We have been doing more and more for less and less. The result has been quantity and not quality on lots of timber money and work with timber goals. We have not been able to exercise our professional knowledge and judgement.

Serious consideration should be given to elimination of outmoded fire positions especially guard stations. These are carry-overs from times when areas were inaccessible. With the advent of aircraft detection, guard stations seem to have developed into summer vacation sites for older Forest Service employees who can do nothing else.

I believe more emphasis should be given to law enforcement cooperative agreements. Forest Service personnel are neither trained nor qualified in law enforcement and as more people use the National Forest, more law enforcement will occur.

Page A-17. There is no reference to use of Land and Water Conservation Fund moneys for acquisition of land for the National Forest System. This fund is currently a major source of financing for Forest Service acquisition of recreation lands. We recommend that the role of the Land and Water Conservation Fund program be identified by the "Environmental Program for the Future" and particularly its relationship to proposed recreation management and Forest Service land acquisition within the 10-year planning period.

Stop further new road construction until the public has been given full opportunity to provide their recommendations, and reduce permanent road construction to the absolute minimum.

I would like to see a significant increase in land acquisition for the purposes of: (1) acquiring areas for wildlife and recreation purposes, especially in the East and (2) blocking out holdings, especially in critical areas.

Our present road and trail maintenance are seriously inadequate, to say nothing of our buildings and grounds maintenance which I don't even see listed.

Include land acquisition needs and priorities.

We strongly censure the Forest Service for failure to acquire the Vermejo Park area in Northern New Mexico.

Another possibility to reduce costs in land acquisition is to have National Forest lands identified as qualifying for exchange withdrawn from mineral entry before an exchange proponent is identified.

Why not begin a program of acquiring more forest lands that are now privately owned in key location, thus providing more natural areas for the public?

Support activities are too dissimilar to give a blanket recommendation for either alternative.

Eastern National Forests, with their small, badly fragmented horizontal and vertical ownerships are difficult and expensive to administer... Land acquisition to achieve at least a majority land ownership (50 percent) on these forests should be a clearly stated objective within a definite time frame. The Wayne, Hoosier Shawnee, and the National Forests in Missouri are some of these. Need 1,800,000 acres of acquisition on these four forests alone.

Favor only those elements which prevent, detect, maintain, inventory. Construction of roads and trails does not belong concealed in general category. Suggest adding separate section on **transportation**.

You have failed to address the factor in your alt's., e.g., land acquisition should be HIGH SUPPLY if applied to EASTERN NF's, etc.

It appears that whatever level is decided on that it is mandatory that all activities be financed and programed at corresponding levels. With the moderate or high level in reforestation a corresponding mod or high level would be needed in soils to provide needed information on plantation location productivity etc., in addition insect and disease, fire suppression would be needed to be increased to protect the improvements.

Throughout the Forest Service many of our potable water supply systems are old and inadequate. Most will not meet State drinking water standards. Intensive program is needed to reconstruct existing water systems at recreation and administrative sites where the facilities are substandard. There is no mention of this serious health problem in the program.

RESEARCH - Improved Timber Utilization

National Forests should not be turned into primarily a wood-producing area. Timber supplies should not be greatly increased. Other uses of the forest must be kept in balance.

Favor the research needed for maximizing timber production, but fear it would become an end rather than a means.

Whenever national supply is met, we should end cutting. Export of timber is an activity which could hurt us greatly if overdone.

Under moderate option: - Increased timber supply of 11 M M M bd ft. over a 10-year period is a reasonable goal to forest if the money is available. Certainly all the other activities listed in the low alternatives are desirable goals.

Major attention should be given over to research on "Improved Timber Utilization" in light of fact that high activity level in this area anticipates the possible effective increase in national timber supply by 29 billion board feet over a 10-year period.

X X It is difficult to believe that research output can be quantified in terms of "29 billion board feet over a 10-year period."

Although I believe that top priority should be given to develop more efficient utilization practices, I don't think that economic and ecological realities will permit increased timber supply at the high level.

X X Increasing timber supplies by the current procedure is more fantasy than fact, especially when increased emphasis is placed upon aesthetically acceptable harvest practices.

Increasing growth and years is a fine objective--doubling in 25 years seems overly optimistic.

Produce the knowledge and technology necessary to increase timber supplies as they are needed by our population. However, you must balance cost factors so that it does not become prohibitively expensive to do this.

X X I question that research has the ability to increase timber supply by 11 billion or 29 billion board feet without cutting into the growing stock or without going into presently restricted zones.

X X Any increase in timber supply in the next 10 years should come from increased utilization.

X X Will enable to do a better management job on each acre thereby getting increased output and improved public satisfaction with both output and amenity values. Increased productivity will help us provide for our own need and avoid balance of payments problem.

Various figures indicate that we have been overcutting our forests. It is my belief that a 10-year period should pass in developing better methods and intensity research and silviculture practices to improve them before increasing harvest beyond the rate that is now being done.

Too much wood fiber is left now as waste. Viable utilization methods should be researched and then enforced in suitable timber contract language and follow through.

Research should be started at Bozeman on machinery for chipping slash and brush in the field. Chips and logs could be removed by low-pressure timed all-wheel drive vehicles without disturbing the ground cover. This would beautify the forests and improve their productivity. This would allow old trees to be removed and then mature.

Greatest emphasis should be on hardwood reforestation and management.

X X There will be great resistance to utilization of the whole tree (litter-fall maintains soil organic matter, unlike chemical fertilizer).

Selective cutting--longer growth periods, no clearcutting, replanting where necessary, complete utilization of all timber cut.

Better harvesting methods are needed including elimination of the destructive clear-cut system that is now denuding and damaging National Forest land.

Very definitely we should improve the harvesting of trees by nondestructive felling. We should particularly utilize the smaller branches which are trimmed off. The photosynthetic energy which they contain should be utilized, either biochemically or physically.

If high option is to be effective, you might try to hold the harvest to lands owned by private timber companies. This would probably insure the effective and efficient timber utilization.

Always include tree planting programs when trees are harvested or burned or otherwise destroyed.

In addition to harvest methods acceptable to esthetics, a concentrated effort should be implemented to reduce erosion in harvest areas. Even in areas where vegetative cover surrounding harvest is effective in holding larger soil particles, nutrients which reach streams are extremely detrimental to aquatic ecosystems.

- X We must make more effective use of the trees that are cut. There is too much waste. We must be certain we can supply 29 billion board feet increase with proper environmental consideration before we commit ourselves to this goal. Our forest is in trouble now because of allowable cuts based on poor inventory data.
- X One harvesting technique particularly suited to the rough steep mountainous, terrain commonly found in National Forests is uphill felling (by jacks and tree lining). A private company in Eugene has used the technique for 8 years. They've saved anywhere from 10-30 percent of the total volume. In conventional downhill felling this 10-30 percent would be shattered and left as slash.
- X Necessary to acquire the proper data to support the high timber culture.
Improved harvesting methods and improved efficiency in use should supercede increased cutting.
- X Particular importance to me is seeing industry strive toward removal and use of so-called unmerchantable material.
- X The feasibility of horse logging should be considered in the Rocky Mountains wheresites are delicate and logs are small enough to be skidded by horses.
- X Find it hard to believe that timber supply increase through improved utilization provided by technical assistance could be increased by an amount equal to 1/2 the present National Forests timber sale offerings.
- X X If we can increase our timber yield this much by better utilization, we should have no problem reaching our timber resource goals.

Modern harvesting and manufacturing methods are geared primarily toward fast production. Not enough attention is given toward efficiency, completeness, and better utilization for highest value products.

You may wish to broaden this research field to include harvest techniques to get more wood out of the forest. Also, you should consider uses for wood which is now considered scrap, such as limbs and bark.

Better slash utilization--more timber should be converted to chips.

Presently there is incredible amount of waste. Revise Forest Service policies and regulations regarding timber sales to get the forest sale areas cleared up and to have that timber that is presently being burned or buried to be hauled to the mill and utilized.

About clearcutting--my objections are not principally visual, but silvic---too much clearcutting has been done on wrong slopes, and over too great an area, for successful reseeding with vigorous new trees.

X X But I don't think the Forest Service should necessarily commit itself to increasing the timber supply. A quality environment rather than high timber output should be the highest priority.

I favor research re waste disposal in urban areas.

Encourage recycling and reuse of timber and paper products.

If timber products become more scarce and expensive, people would reuse the useful materials in older buildings or would maintain them longer and better.

Dismantling old structures for salvage should provide work for suitability supervised unskilled labor if it could be removed from carpenters' union jurisdiction.

Why not look for ways to make it again economically feasible to salvage the good lumber that now falls to the wrecker's ball to become a disposal problem?

There is no adequate comparison of wood with other materials as a building material. There is salesmanship on VII-31 but no analysis. Much of the earth is suitable for construction in the form of adobe, brick, tile, cement and stone--all of these materials are better insulation than wood for both heat and sound. The various tradeoffs in the use of the various substances should be clearly delineated.

Eliminate or curtail, all wasteful utilization of wood in products such as junk-carved doodads, trinkets, and gadgets.

Would like to see a deemphasis on large timber production and an emphasis on lower consumption of wood products.

X X This area of research is a must with emphasis on getting knowledge applied.

X X Improved utilization standards have come with increased value and price of processed forest products. We feel the assumption of not great increase in price is unrealistic.

Along with research of improved utilization should be determination of the environmental impact of different levels of utilization.

There are many new products that can replace wood, hence making less of a demand on using all our trees.

X X Essential to continue this research effort so that wood harvested is used in optimal manner.

Research is not needed to eliminate some of the more obvious forms of waste now occurring in the forest, during storage and transportation and in processing. Unfortunately too many valuable research results have been lost or buried because of "economic realities."

- X The trick of it is to get the results of research into practical application.

The results of research should be first put to actual application and proven beyond doubt to be practical and realistic before there is any increase made in the annual allowable cut of National Forest land.

- X It will take a lot more than results of research in timber utilization to increase the timber supply by 11 billion BF in a decade. One of the most pressing needs on private forest lands is a national forestry practices act similar to the one passed recently by the State of California.

The wood-using industries have been notoriously slow in adopting the new technologies capable of increasing utilization.

- X Got to get the word out to the mill operators.

Marketing concepts might be changed to encourage consumers to wood and paper products which are either necessary or have long ranging values. Uses such as excessive packaging and disposable materials could be discouraged.

We support activities which improve land and water protection. Research activities which encourage use of fossil fuels to increase production should be discouraged on public lands.

- X X Our wood fiber needs may be affected by petroleum availability. We must maximize existing and increase future supplies. The present scattered land holdings are difficult to administer and manage.

There is some indication that projection of need or per capita usage is too high. This generation should not spend money so that the per capita use of pulp and paper is 1,200 lbs in year 2000 when we now only use 600 per capita. Research should be aimed at maintaining current per capita use. This applies to other disciplines too.

Cutting young trees for Christmas trees is an utter waste. Use of tops from trees cut for more valid reasons could be used.

Suggest more independence between management--sales--research. The public to see reports of each--then perhaps one might agree to higher yields.

The leverage provided when one dollar of stumpage placed on the market provides \$25 (or more) of goods and services is not well known or understood. We could all benefit from a greater use of this concept, particularly under our new look at resource availability and energy conservation.

- X X Compare what we do as compared with private industry. The U.S. Forest Service is too under-financed.

X X All increases must be within land capabilities.

X X I think we're over obligating our timber values already.

Intensive research on timber use needed--not more unsustained yield cutting.

Surprised that you don't list out a provision for basic work on ecology of merchantable and potentially merchantable species.

X X This entire research program is totally unrealistic in a 10-year program. Do all of these pages of research "pie in the sky" have anything to do with the background of the present Chief?

X X This would have benefits in a geometric progression over future years.

X X We have not been in true management long enough to gain knowledge. We are overcutting in some areas due to poor inventory techniques.

X X The whole area is asking how much icing you want on your cake, and I am not sure if we are being served cake yet. (applies to all research activities.)

X X Need to strengthen larger district organizations with funds and professional and technical people. Reorganizations of forests, RD's and RO's have not added any funds or people to the districts on a per wood unit or acre basis.

X X Statement that "implementation of research results will depend upon economic realities" borders on the obvious. The correlation of increased research efforts and expanded resource outputs "ain't necessarily so."

X X We feel the research sections on improved timber utilization and intensive timber culture does not recognize that knowledge about soil processes and soils is basic to successful forest management.

On page VI-2 it is stated that EPFF is predicated on the assumption that the past economic growth rate will continue. I would expect that two developments--awareness of approaching world shortages and growing dissatisfaction with lifestyles--that are rapidly becoming apparent, will call for considerable revision of some policies.

X X Much of this activity is the province of private industry. The Forest Service should encourage maximum industry participation.

X X Research should be oriented to resource systems needs.

Why not look for ways to make it again economically feasible to salvage the good lumber that now falls to the wrecker's ball to become a disposal problem?

RESEARCH - Intensive Timber Culture

X Housing needs are critical Nationwide. We must begin now if we are to meet our needs near the end of the century.

XX All facets of the economy may benefit from a high productivity here.

XX I question the biologic capability of our forests to produce any more than the level stated for the moderate alternative, and this would mean applying every technique known, immediately, on every acre. On past performance, this is a totally unrealistic assumption.

X Goal for increased timber growth is unattainable from a practice standpoint.

X Highly desirable so long as we do not commit "genetic suicide" and so long as cultural methods are compatible with other National Forest values.

Intensive timber culture may be a sound approach on some lands, but it is not appropriate for the National Forest System. On the National Forests, a much broader perspective of resource values is required.

X Improving quality will take dollars - this will hardly result in lower costs. A 50 percent increase in growth is possible, but I doubt if you can eliminate pressure to harvest on marginal or unsuitable areas.

Timber culture not compatible with other multipurpose usages. Approve selective cutting only.

Increasing growth and years is a fine objective - doubling in 25 years seems overly optimistic.

If research is able to increase COMMERCIAL timber growth by 50 percent in 25 years, it would solve most of the timber problems of the United States.

Research in this area should not be used to turn forests into tree farms to the detriment of wildlife and other natural values.

None of the alternatives. I am not in favor of any commercial timber growth on the National Forest System. Your proposed increase would put too much emphasis on timber, thus not fulfilling the responsibilities to other natural resources.

By doubling the growth, we can then safely increase lumbering without damaging sustained yield.

(X I favor this alternative, but I don't think it is possible to double commercial growth in 25 years.

We are afraid that attempts to increase commercial timber growth will be at the expense of other uses, many of which have a higher value than timber. It can also lead to monoculture with the attendant vulnerability of the entire crop or stand.

X X I'm not one to judge whether we can double timber growth in 25 years, but even if we did, could we be able to use that product? For fiber, maybe, but not lumber.

X X It is very doubtful that research units as presently oriented could actually produce the result claimed. However, it is probably worth the cost to give it a try as the country will need the fiber.

X X Diminishing land bases and increased demand for wood products that are both energy efficient and biodegradable as well as perpetually renewable means we must increase effective growth as rapidly as is feasible. Much research in intensive culture is needed today.

X X Research needed to develop trees that grow faster and are insect and disease resistant and in developing improved methods of reforestation.

Hopefully, the increase in yield would not be at the expense of timber quality; i.e., reduction in strength or dimensional characteristics.

X X Doubling of wood growth will reduce wood strength and cleanness proportionately. Do we want to live in matchboxes?

United States Forest Service lands must be intensively managed for timber production in order to be able to carry their "fair share" of future timber demands. System of priorities should include set-asides for single use preservation on lower timber site lands with moderate and high sites intensively managed for multiple use. On such lands timber production should be overriding dominant consideration. Intensive management practices should include: (1) Prompt reforestation, (2) chemical release spraying, (3) precommercial thinning, (4) fertilization, and (5) genetics improvement. Research should be geared to support growth of these programs.

Intensified timber cultural practices should be designed to get all acres producing (planting), maximum the growth (thinning), then if time and money permit, to increase the quality.

Maximum utilization of marginal sites is a particularly critical problem for the land manager. Obtaining maximum volumes from all available space is important.

X X With so many acres of CFL in private ownership, we need cooperation and compliance of private landowners to get increased raw materials from such lands. Getting this knowledge over to the landowners is a bigger challenge than discovering the method.

X X We are probably going to grow our timber on fewer acres as other uses begin to dominate.

X Intensive culture costs money. Unless the economic picture changes, a landowner cannot afford the investments required to double growth.

X With so much forest land in private ownership, we need cooperation and compliance of private landowners to get increased raw materials from such lands.

If you mean doubling commercial timber growth on privately owned lands-- I would vote for that.

The proposal for more efficient use of the productive capacity of private as well as public forests in meeting national need is a positive move. Private commercial lands are both more productive and more extensive than Forest Service holdings; the Forest Service should concern itself only with supplying a portion of the national need and that share should be determined by the capability of its land in comparison to that privately owned.

We should make more effective use of the productive capacity on National and private forest lands.

Money should not be wasted on poor sites - which constitute a high percentage of National Forest lands in the Rocky Mountain area.

Timber harvest on unsuitable land should be eliminated. Instead, National Forests should be used to provide resources that are not always or even a significantly large part compatible with high yield forestry.

X We need to increase timber production, but put the effort where it does the most good. Every acre that grows trees is not best suited for that purpose.

X X Concentrate on improving growth and yield on present commercial areas.

Reduce the pressure to harvest timber on unsuitable lands particularly on watersheds to prevent erosion.

Around here there is extreme pressure to harvest marginal lands and there are many Forest Service lands that have been cut here which will probably not grow another crop of commercial timber for several generations.

What do you mean by--"reduction of pressure to harvest timber on unsuitable areas?" Are you favoring the harvesting of timber in areas of poor growth, climatic conditions, or gradients not likely to grow timber through regeneration--either natural or artificial? Are you trying to reduce pressure (public in nature) that produced the Bolle Report on Clearcutting?

Do not want public lands turned into Weyerhaeuser tree farms.

If private forest production can be increased through technical assistance, then it may not be necessary to commit Federal funds to double commercial timber growth in National Forests which would compete with private forest owners.

X X Concentrate on private lands.

Include options to intensive timber culture and evaluate both ecological and economic factors.

If timber products become more scarce and expensive, people would re-use the useful materials in older buildings or would maintain them longer and better.

More emphasis should be placed on the public having less timber; this will help eliminate excessive waste.

The only thing that I don't like about increased commercial timber growth, is that many times this increase favors monocultures.

I am against pure stands of "desirable" species of trees. Such practices encourage insect damage by disrupting the balance of a diverse forest system.

Increasing growth probably (who knows when you won't say it in your book) means artificial selection for high yield. Any freshman ecology student knows that this can only be done by sacrificing plant income of energy normally spent on resistance, competition, etc.

The environmental effects of intensive timber culture are still almost completely unknown, but such a single crop imbalance in the forest ecosystem is probably untenable.

X X With present demands for food throughout the world, fertilizing of trees has to be much lower priority to fertilizing food crops. Any intensive tree culture is welcome which does not add nutrients to surface water, seriously degrade forest aesthetics, or create very high fuel buildups.

Do research on impact or compatibility with other forest uses or resource systems, and particularly on "Wildlife and Fish Habitat System."

Set research objectives on economic and ecologic risks of monocultures.

We highly recommend increased use of helicopters, cables, etc., to prevent drastic earth disturbance and resulting soil and water degradation.

Under high option, extensive monoculture of fast-growing species is undesirable aesthetically and risky ecologically. Would involve heavy use of pesticides and fertilizers.

Assessment of intensive timber cultures must be made more regularly; their failures in certain environments would then be clear.

X A quality environment must have priority over increased timber production.

X I would stress the words "consistent with environmental standards."

Evaluate for duplication of research being conducted by forest industry.

Intensive timber culture will reduce most wildlife production unless alternatives to present known methods are developed.

Proposals such as logging at Ketchikan, under the guise of experimental purpose make a "shame" of scientific inquiry.

If it can be done by "natural" means, it would be worth pursuing.

Very questionable estimates of increased commercial timber growth, without huge increase in funds for thinning and other cultural practices.

Results in timber culture take years of development. Let's not start cutting trees like mad today, without waiting for the findings in this field of research.

Clearcutting should be kept to an absolute minimum, in my opinion.

I feel the research conducted by the Forest Service should be weighted heavily towards improving the commodity supply programs while maintaining the productive land base of our National Forests. By placing emphasis in these areas, we can fulfill the growing demands of our Nation and at the same time provide the quality of environment being demanded by our recreating public. Research activities which provide very little tangible benefit should definitely be given lower priority.

X X The "highly intensive efforts" mentioned in connection with this option would have to be accompanied by social, political and economic forces amendable to broad national land use planning and close correlation with S&PF programs to accomplish anything like the stated results.

X X We have much if not most of the knowledge and technology already. What we need are the FUNDS to carry out the programs, not more research to tell us what we should be doing if only we could.

X X This area isn't too important, especially since only about one-half of present growth is harvested.

The statement on p. VII-17 on nutrient depletion in relation to timber cutting (harvesting) is simply not true. "The harvest of trees at infrequent intervals" is not the subject at issue. Clearcutting of old growth is.

Incorporate into "Timber Resource System."

Private industry should handle this.

No increase for commercial timber. No more harvesting "surplus."

- XX Expressing research goals in terms of "percent increase in timber growth" is not descriptive. It would be better if research would list the problems they are going to solve.

If this section pertains to old growth forest (all we have left and all we are likely to ever have) then I do not favor any intensive timber culture on National Forest lands.

- XX Compare what we do with private industry. The U.S. Forest Service is too under-financed. To get public attention, we must compare with private industry. We have the people, we must get the dollars.

Provide as much growth and yield as needed by our population, keeping within the bounds of sound economic expenditure and environmental standards.

- XX As urban development encroaches on forest land, increase in output per acre will have to be attained. Use of fertilizers, high yield tree breeding, change of species for certain sites would have to be increased.

- XX Research: Rather than 18 separate programs reduce to 6-8. Definitely, there is a need for research, but this program is out of balance with administration.

RESEARCH - Insect and Disease Assessments

- X I'd rather see this fitted into needed assessments for other uses and we should not identify one or two pests but how all (and which ones) pests affect a management unit, a habitat type, an ecosystem, etc.

Regroup technological forces to push the salvage of timber killed by insects and diseases in timberlands across the nation. Priority to go to conifer forests in the major wood producing regions of the land. Inventory techniques by air deserve continued high priority to provide timely monitoring results for management decisions.

The more intensive timber culture is attempted, the more apparant the insect and disease factors will become and considered important.

- X X We must identify the practical implications of pest management programs before we determine what specific program is best.

There's a great need to develop a pesticide without the residual effects of the products presently available.

Pesticides should not be used on Forest Service lands because of the tremendous environmental damage they do. Even age management and single species planting are the real problems.

The most important aspect of insect and disease projects must be the elimination of use of toxic chemicals wherever possible.

In formulation plans for pest control actions, prime concern should be given to long lasting and widespread (several ecosystems) effects of control especially in chemical pesticide use.

I would like to see toxic chemicals (including pesticides) eliminated totally some day, and replaced totally by environmentally sound biological and genetic controls.

Find alternatives to massive applications of DDT, a very long-lived pesticide.

Usage of herbicides and pesticides on national forest land will be absolutely forbidden.

Alternatives to deadly toxic chemicals must be discovered.

The Forest Service needs to discontinue its reliance on pesticides that are destructive to fish and wildlife. An example is the recent insistence on the use of DDT to control a Tussock Moth outbreak.

There is a real need to develop alternatives to the hard pesticides. There is also a need to recognize that part of the problem may be due to the development of monocultures as a result of wide-scale use of clearcutting.

Particular emphasis on eliminating use of toxic chemicals and analyzing side effects of pest elimination on remainder of the ecosystem.

Hope this research program will also intensively study the devastating effects of chemical insecticides on the total forest habitat.

Questionable justification by research for use of DDT on the Tussock Moth M. E. Oregon. The decision to use DDT seemed based in politics not research opinion.

The recent Douglas fir tussock moth problem and successful control with DDT reflects the public concern over certain management tools. Some of the alternative controls systems to DDT may be more damaging to the total environment; therefore, greater emphasis is needed to reduce the impacts - do not reduce management efforts but reduce impacts of these efforts.

Of highest priority should be the identification of environmentally computable methods of pest and disease control.

Protecting forests from insect and disease must eventually be done biologically without chemicals and only where man was the initial cause of the problem.

Strongly recommend research into biological control (sterilization) and implementation programs.

Some work needs to be done in this area, but major emphasis should be on biological control of insects and genotype control of diseases.

Clearly there is urgent need for the Forest Service to develop more environmentally acceptable pest control techniques, and I consider this research to be one of the most urgent tasks of the Service for the near future.

It is very important to learn what impact management programs (for example, pest control) will have upon nontarget species of the managed area.

You don't need much more work on these. Rather, you need to change management tactics so as to return insects and diseases to their original roles. Avoid ecosystem simplification: that is a sure invitation to insect and disease holocaust. Research ways you can keep or duplicate natural systems.

x x High level needed mainly in area of natural or biological control.

Biological controls must be made viable alternatives to toxic, non-biodegradable substances. Assessments must include beneficial insects. Let's start with an understanding of the implications of the pest management programs rather than carry the program out and hope for the best.

Research needed for indicators (lichens, trees, other vegetative species) to monitor environmental conditions, particularly in industrialized regions.

Insufficient information--Research should include assessment of natural role of insects and diseases on the functioning of forest ecosystems--Research natural areas needed for such a periodic assessment.

Balanced ecosystems are little bothered by pests. Monoculture, desired by lumber companies, encourages insect and pest growth.

Protect forests from "harmful" insects by natural measures, birds, snakes, toads, other insects like lady bugs, prayermantis, plants like marigold. No use of DDT, pesticides, insecticides, herbicides, etc.

Natural predators will be used to control undesirable insects.

X If use of DDT is the best answer we can buy, then let's not add more money to it. Use current levels of \$ to work on natural I&D control rather than spray programs.

of

X X Insects have always consumed more/the natural resource than humans. Control measures should be kept in harmony with the overall environment.

X X Nature raised forests millions of years without man, maybe we try to control it too much.

X X Consider effects of fire and timber harvesting. How do they affect natural control?

Add to this alternative: Identification of the ecological niche and function in the biotic community of the major "destructive" insects and diseases on timber production. This research is necessary in order to determine the real net effect of pests and diseases in the ecosystem..

Get your research together before you try to fool mother nature!

I found no mention of breeding trees for pest resistance. I think that this should be a part of the integrated approach.

Believe that the potentially positive ecological role of many insects in forest ecology should not be neglected, in this study.

- X X I would also suggest that research be done into the natural roles that pests play in the ecosystem.

Be careful to understand implications of pest management programs and to use those that manipulate the environment as little as possible.

Would rather see increased timber production come about through insect and disease control rather than through clearcutting.

- X X No doubt about it, we can increase our yields if we can stop the kill.
- X X If the major insect disease problem can be identified, assessed and evaluated in the next ten years, we will have made major accomplishments.
- X X More research for control of dwarf mistletoe in the Western United States needs to be done.

Present insect and disease assessment is ipso facto, i.e., damage is assessed after it has occurred. The Board feels that this situation must be reversed. Emphasis on early detection is required. The projected reduction of pest impact by 25 to 50 percent is impossible without effective early detection programs.

- X X Timber losses from insect and disease causes exceed losses from fire.

- X X Type of I&D research (high level) would be that associated with intensive management of forests. There would be more stands of single species, with greater change of spread of pests from tree to tree.
- X X Having worked with research and seen the amount of funds expended with every little return ... I don't think we should invest anything additional. Good forest practices help to reduce the impact of insects and diseases.
- X X Especially with environmental constraints, we must be able to move rapidly and effectively with proven acceptable methods.
- X X Concentrate on four or five major pests. Will have to continue on major items until the public recognizes insects to be as harmful as fire. It is true, insects destroy much more timber than fire, but the average layman doesn't see the hazard. If this is left unchecked, the timber mortality will create a tremendous fire hazard. The current spruce budworm outbreak in the Eastern United States and Canada encompasses over 100 MM acres, nearly twice the acreage of the 1940 outbreak. We will need to continue our work with pesticides for two reasons: Industry is not always

willing to spend the dollars required to manage stands so they will not be as susceptible to insects. Biological agents are becoming more and more effective in controlling insects. However, to apply them over millions of acres is not always feasible from an operational standpoint. In addition, the cost is prohibitive in some cases even if it is effective. Consequently, we must continue our work with pesticides at the same time that biological agents are being studied.

In respect to the research activities in the insect and disease assessments and the pest management systems. It would be most ideal if the high alternatives of both of these projects could be implemented as I feel that these areas have been sadly neglected. It was indeed tragic that the Forest Service had no other alternatives for control of the tussock moth in the Pacific Northwest than the use of the controversial pesticide DDT. There were little data to critically evaluate the efficacy of DDT in comparison with other candidate pesticides either in the field or in the laboratory. In my own department of Entomology there was no unanimity. Many years ago there should have been much more emphasis placed on alternatives, more specific chemicals and other alternative approaches to the control of the pest, particularly on the environmental factors which cause these pest cycles to develop. This can only be accomplished when intensive research is centered during periods of low or non-economic infestations as well as during epidemics. To increase research funding only during periods of high population density, as we are doing now, is like locking the stable door after the horse has been stolen.

X It always seems that we are a little "Johnny come lately" on insect and disease assessment. By the time research has identified the problem the damage has been done.

X I see little difference between the moderate and the high. It seems like an admission that you don't know now and probably won't try unless the high is selected.

X Page VI-24. Under Inspect and Disease Assessment -- First sentence should start, "Develop the technology to identify, assess, and"

Tell story as it is - assess problem of disease - explain it to public - you have done poor job of public relations.

X Insect and disease problems are costing too much right now.

Private industry should handle this.

This should be stepped up or reduced, depending on the general economic contribution it can make regarding the health of the timber resource.

This kind of activity seems to have a bleak future in respect to achievement of useful techniques.

None of the alternatives. I would identify your program and alternatives under this Research Activity as a system developed for your overall system and research activities in timber harvesting and production.

I would propose that this Research Activity be modified to accept ecological forestry. That is, a system coordinating forestry in a balanced, forest ecosystem.

Difficult to distinguish from Pest Management Systems which should receive emphasis.

Why not combine this with "Pest Management Systems."

Please be careful - have ecologists carefully review plans and try to keep politicians from "muddying the waters."

X X The definitions under all three of the alternatives are very vague and unclear.

X X I can't understand what high alternative means.

This section is too vague as to the specific types of research programs needed.

X X Discussion of this area appears to be very vague in CI 13.

Cannot comprehend what is being said.

There must be every effort made to find new methods of control, both for fire and certainly for insect control. No more Tussock Moth - (We must never again use DDT) - blunders!

Research to find a blight resistant strain of chestnut should receive a high priority.

RESEARCH - Pest Management

Disease research programs will be expanded with identification of natural predators and emphasis on natural controls.

X Having identified those pests important under the previous topic assessments, assign priorities and then stick to them until you come forth with an integrated system. Don't do as was done with Blister Rust. We're back now to dependency on one system which will surely break down in time.

Is the development of integrated systems for managing insects a necessary plan of action other than for the primary purpose of producing habitat for timber production? How can your system be classified as environmentally sound when you propose to rely heavily on toxic chemicals in your low alternative?

X Pest control methods must be found that are not harmful to the balance of nature.

Use of pesticides and fertilizers, and genetic improvement, should include estimates of their effectiveness in increasing growth and a discussion of when such increases should be taken into account in allowable cut calculations.

Research controlled burning. Fire kept pests down before Forest Service.

X Does the moderate alternative eliminate the possibility of integration of systems for major pest management? High shows "pie in the sky" benefits but doesn't explain how they will be obtained.

Is chemical control compatible with sustained yield and M-U?

The EPFF's discussion of the forest pest control program should state which chemicals have been approved for use and how much of each chemical has been distributed in the past five years.

Reliance on heavily toxic chemicals not in the public interest, and is of questionable legality.

Control insect pests by means other than pesticides that result in killing beneficial parasites, birds, and wildlife. Only short life pesticides used in very limited local areas can be justified environmentally or economically.

Be extremely careful with herbicide campaigns. Too often these are used in the West to cure overgrazing. Too similar to using aspirin for lung cancer.

Should work for control by other means than by toxic chemicals.

The Forest Service needs to completely eliminate its use of toxic pesticides such as DDT.

Minimize use of toxic chemicals. Plan to phase out their use completely in the near future. No DDT! Maximize use of nontoxic controls.

We must alter our control methods away from toxic chemicals toward more environmentally sound methods.

Only way to combat some pests is effective pesticide usage - better public relations program is needed.

The long-range impact of toxic chemicals is the true criterion of their worth.

No tolerance of artificially synthesized chemicals or biocides should be permitted in National Forests.

X X Page VI-25. Under Pest Management Systems -- The reference to toxic chemicals as used has too broad an implication. It would be better to change as follows, "Rely heavily on pesticide, but use only those that minimize adverse environmental effects."

If we don't spray anymore pesticides, herbicides, and fertilizers around it probably would help a great deal.

Chemical sprays poison the humus and, if continued, affect future forest growth.

X X I think chemical control will and should be with us for some time, but this alternative provides flexibility in choice of control.

Toxic chemicals should not be discriminated against they are currently our most effective artificial weapon and probably will continue to be for some time.

The 21st century cannot afford chemical toxins.

We should phase out most chemical except where they can be applied to individual trees and rely on biological controls.

Your recent tussock moth DDT spraying was a fiasco and the real costs of the spraying are only now coming to light. Much more research and consideration needs to go into nonchemical pest management.

Against disease control by aerial spray.

In no way should pesticides and herbicides such as 2, 4, 5 T be used in the National Forest. People on local level must be allowed to determine their own environmental qualities when concerning the air we breathe and the water we drink.

If pest control methods using natural methods rather than chemicals, then a high alternative might be justified; however, I feel a healthy forest has the capabilities of withstanding pests.

The Forest Service must avoid basic alterations of natural forest ecosystems and place more emphasis on biological controls of forest problems.

Reduced use of toxic chemical use should be implemented in all alternatives. Emphasis should be placed on biological control research and plant breeding research to develop pest control which is compatible with most all ecosystems affected.

Biological controls are not the panaceas some think, so make your research broad and deep. No more starlings, house sparmus, African bees, etc.

Some work needs to be done in this area, but major emphasis should be on biological control of insects and genotype control of diseases.

Would like to see a lot more research directed toward biological aspects of small area infestation of forest insect pest control.

Stress biological control. No pesticide usage.

Some way of controlling insect and pests in a natural fashion, without noxious chemicals should be a priority. However, if this is not successful then the use of some chemical that works should certainly be considered.

We should try three or four integrated pest management systems that could then be used as models in other areas. We need to do a topnotch job on the first few, otherwise, we will lose public support where it's most needed.

Tussock moths should be controlled by polybedial viruses or Bacillus thuringiensis, rather than DDT or Sevin.

X X "Let's not do with I&DC what we did with fire."

X X Concentrate on nontoxic controls. Once developed, they will be largely useable on most of the additional problems.

Pest control must eventually be "a mix of cultural, biological, and genetic controls."

X X Concentrate efforts on pest control methods other than pesticides.

We cannot try model simulation until we knuckle down and gather data on impact loss, post suppression information and also prevention techniques. We preach prevention but we haven't set up plots for the public to see that prevention can work. Simulation models need a wealth of concrete information (data) that we are not willing in many cases to collate.

- XX Needs emphasis but statement included appear to be there just to make this high level look appealing; i.e., inc. timber supply by 25-50 percent, increase predictability of forest regeneration practices.

The use of chemicals is merely treating a symptom rather than a cause. There must be a blending or synthesizing of the many disciplines relating to forest management and insect population manipulation.

- XX A lot of work needs to be done on dwarf mistletoe by means other than silviculture. In bad areas, silvicultural control means clearcut.

Combine the host of minor pests into a low priority of work nationwide and shift the program of the past 10 years to regions needing reinforcement of skills and funds. Pacific northwest and southern pine - (insects).

One critical area not mentioned which is in dire need of attention is in control of cone and seed insects in seed orchards.

Under High Option: - At the USFS Impact Meeting at Marana Park, Tuscon, Hie Mountain Pine Beetle was identified as the No. 1 bark beetle pest in the U. S. Why is it not included in the list?

- XX The most important westwide pest has been ommitted -- i.e., the mountain pine beetle. Please include. The only effective pest management system will be to consider ecosystemic approaches -- holistic approach with particular emphasis on host tree dynamics. Mountain pine beetle is a prime example, as shown by results to date of such an approach for a MAJOR pest.

Believe that the sooner the Forest Service and other natural area managers accept the idea of other forces in nature that may at times result in some "wood damage" and accept the idea of maybe living with some of this damage or even expecting some, the better off the natural world might be.

- XX Sound approach to pest control - needs to employ global systems viewpoint.

Pest management can be a good way to really learn to work with, not against, the system. But it takes an immense amount of information and doesn't always work.

I think it dangerous to predict just which pests will be controlled and when they will be controlled.

Increased fiber yields by reducing insect mortality is of the utmost importance in the forest management program. Your list of major pests does not include Balsam Wooly Aphid.

Add armillaria root rot to the list of diseases which may be studied.

X Need particular work on dwarf mistletoe.

XX Our past efforts have been a total failure, we have never been able to improve on nature.

Be careful - have ecologists carefully review plans and try to keep politicians from "muddying the waters."

XX It is a shame that we cannot control our present pest situation just because we do not have the knowledge.

Presumably plant and insect metabolic studies will be included.

The good work of the past decade has produced useful information. A need now is to see that timberland owners nationwide receive and utilize technical data available from the U.S. Forest Service. Push to improve communications by user groups; small, medium, and large.

XX We cannot relax this program. It must be implemented to the limit of funding at all times. If we don't we lose ground. Insects and disease are still the greatest killers of trees, ruining each year over 50 percent as much timber as is cut.

XX The further we manage away from the natural, the more we set ourselves up for disaster. Should concentrate on assessment for the next ten years.

Emphasis should be on minimal controls and should prohibit drastic moves which would take years to correct. Natural "catastrophes" of pests often have rapid biological rebound, as with the regreening of tussock moth-damaged trees.

Under Moderate Option: - The main thrust in developing national control procedures should be in understanding the causes of forest pest epidemics, both for predictive and management purposes.

XX Combine with Insect and Disease assessments. Appears to be some duplication.

It would be foolish to attempt eradicating all destructive insects since they "usually" are a natural part of the ecosystem.

- XX If this research can do what the objectives claim, it should have a high priority.
- XX Increase in this type of research should be proportional to specific problems at hand or predicted.
- XX If we can get on top of the pest problem, I'd be glad to shoot for the high timber utilization category.

Environmental impact analysis required.

Incorporate into "Timber Resource System".

Am not in favor of DDT spraying on National Forests in light of latest data available on the subject. I believe that suitable substitutes will become available and that when they do even these must be used as sparingly as possible and only if absolutely necessary.

In favor of prudent use of pesticides in the forest due to their undersirable effects on water quality and wildlife.

RESEARCH - Protection of Wood in Stumpage and Use

This program is probably the least understood as to how finished lumber can be treated to extend life without affecting the natural grain being dulled. However, we, and most everyone, would applaud and approve an obvious lower cost of maintenance and the extending of the timber supply.

Extend the life of wood in storage and in use as much as possible, balancing against this the increased cost of doing so.

Must quit being so wasteful and find uses for all of our natural resources.

This area of needed research is going to be the base upon which the future of our resources is going to hinge.

Try to prevent waste. Safer organic chemicals are needed that are not harmful to animals, humans, and the wood.

Favor moderate as long as it doesn't involve increased use of current pesticides.

Favor program to reduce losses in wood, but question use of pesticides and preservatives.

Faced with the loss of some essential preservatives compounds, we must have other acceptable substitutes available for use. We certainly need further development on loss prevention for wood substance, brightness, and pulp yield for pulp chips.

High alternative provides excellent means of conserving wood products. Properly managed on a sound environmental as well as economic basis, trees are indeed America's renewable resource.

Any study such as this, that reduces waste and helps stop the use of harmful sprays, is good and should be put to use in the highest degree.

No research is needed to cut down on some of the loss of wood storage, transportation, and handling. Elimination of storage and transportation in the water would prevent a great deal of physical loss of logs as well as wood damage through barnacles and marine worms.

Careful use of already known procedures will accomplish much of the higher categories.

X X High Level: Has beneficial implications to homeowners, both in quality and expected longevity of the homes they buy. This could help reduce the rate of depreciation.

X X The wording seems misleading regarding goals. The goal of research is to provide the technology to reduce annual replacement costs by 50 percent. If used, this would increase the timber supply. The reader needs to be apprised of the big gap in time and costs between obtaining the technology and actually reaching the goal of increasing the nation's wood supply.

X X Also encourage the use of native stone in construction and use of methods, etc., that will last centuries rather than decades. Contemporary styling and low standard sloppy construction have no place in a realistic construction program. We cannot afford to rebuild every 20-40 years.

X X Provide environmentally desirable designs and treatments of wood for greater user-satisfaction and lower annual cost in residential building.

X X Needed to make wood, a renewable resource, more competitive with non-renewable resource building materials.

If this could be accomplished, will eliminate a lot of the pressure for increased harvest.

X X Could substantially alter supply requirements for wood fiber.

X X Quality is failing. Fiber outputs are the emphasis.

X X Cost Effectiveness - We are approaching point of diminishing returns.

X X From the description, it is difficult to assess the changes for success or the attendant costs.

X X Don't provide subsidies to transportation companies by transporting lumber to distant areas when lumber from those areas is being transported here.

We note no specific reference to recycling of newsprint, a program to utilize waste sawdust, or a program to require upland storage of logs to avoid economic loss due to insect infestation and water pollution.

X X Stress finding methods that are definitely not a hazard to the environment of human health.

In research concerned with the preservation of lumber, put more emphasis on keeping it dry, and less emphasis on chemical preservatives. You can extend the service life of wood by reusing it.

X X Enough time and money spent here.

X X Re "high" - "This alternative sounds like fantasy land."

What is the difference between this system and the "improved timber utilization" system?

Careless "typo" (thinks "stumpage" should be "storage") doesn't commend the care with which this item was prepared.

X: Under Protection of Wood in Stumpage and Use -- First sentence should start: "Develop technology which will reduce losses in quality...."

XX This program is closely related to pest management and should be merged into it to save overhead costs.

Incorporate into "Timber Resource System."

This seems like an activity that private concerns should be involved with, and the Forest Service should hardly be involved.

X: Why should we be storing wood?

Too big a can of worms. Let Environmental Protection Agency and chemical companies resolve pesticide clearance first.

RESEARCH - Fire Prevention and Hazard Reduction

The emphasis on "Fire Protection" for the past almost 70 years has made the area of "prevention and hazard reduction" one of their strong points. The excellent long term record should not be allowed to lapse - should be maintained. On the other hand, there is no particular reason for greatly enhancing the effort under a "high" category. There are efforts by liberal environmentalists insisting that fire is a natural course of events, and efforts to stop or limit Forest fire damage (developing new methods? by research) should be curtailed.

X X Agree with all statements, but do not feel that a one-third reduction of man-caused fires in high risk areas is realistic. Believe we can reduce the damage, but not the numbers.

X X Concentrate efforts on improving effectiveness in detection and suppression.

If possible, hold man-caused fires at present levels despite increasing use of high risk areas by the public and in consideration of the cost factor.

X X Use the "rifle" approach instead of the "shotgun" approach. Zero in on the known fire causers. This includes Forest Service slash disposal fires (controlled burns). The public is getting cynical about this, and if you permit fires to burn uncontrolled, as in wilderness areas, just forget preaching to the public about being careful with fire.

X X Fire prevention and hazard control are currently near an acceptable level, but should be increased due to increasing values of resources.

Holding fire damage to present levels with a 20 percent increase over current levels of man-caused fires seems unlikely even with an 80 percent increase in costs.

Must keep man-caused fires at a minimum although fire is beneficial in many instances.

Greater cooperation between fire protective agencies and more manageable protection boundaries are needed.

X X We now need to reduce the costs of this activity.

X X I am concerned about the increasing costs of fire suppression and the sophistication. The emphasis should be to hold costs to less than current expenses.

X X A cheaper way than suppressing fires.

On page VII-11, I question the statement, "The prevented fire results in no adverse impact on soil, air, and water," unless that prevention includes eliminating fuel accumulation. If it doesn't, you have not

prevented fire, you have postponed it and added to its potential soil, air, and water impacts.

The statement that prevented fire has no adverse impact on soil, air, and water is utterly contrary to United States Forest Service fire-management data (VII-11). Prevention of fire has high and negative impact on soil and potentially high impact on water and air if wild-fire occurs under conditions of unnatural frequency and magnitude.

Recent Forest Service publications have emphasized the accumulation of fuels in forests. We need data on rates and amounts of decomposition. This is just a part of the problem of how old-growth forests work.

X Increased emphasis in better management of our land and in fire detection and suppression should keep us ahead of the game.

Fiber recovery from high fuel density sites.

Selective logging or small clearcuts are a very cheap, effective means of hazard reduction. Keep things as moist as possible by avoiding practices which desiccate humus, duff, litter, and deadwood.

The plan should include provisions for increased hazard reduction and fireproofing in areas of high fire incidence, slash disposal (total piling and burning, or chipping and scattering).

Too much total fire protection has resulted in heavy fuel accumulation and increased danger of wildfire. Controlled burning, or allowing fire to burn once started, should be strongly considered.

I recommend that the first priority of the Forest Service would be the reduction of this 40 years accumulation of fuel that is presently in our forests.

Conduct more prescribed burns for hazard reduction, increase of forage for livestock and wildlife.

X With the dry condition here (Arizona), some of the larger materials are on the ground 40-50 years before completely decaying. Broadcast burning is the only economical method of fuel control.

X There must be an increase in fuel management under any alternative.

X Let's call this fire management. That may become the best prevention.

X Must be concentrated in high hazard areas.

Really push for hazard reduction so that lightning fires can be allowed to burn more often and so that man-caused fires will not be as disastrous.

X Need special emphasis on hazard reduction, especially on old sale areas. More emphasis should go to natural use of fire.

Emphasis must be on prevention of totally destructive fires which threaten life, property, and the long-term welfare of the forest. Controlled burns and natural burns should be emphasized along with managing the forests so as to simulate the regeneration effect of natural burns through timber harvesting.

Also take into consideration that fires in some areas may be desirable.

The Federal Water Pollution Control Administration recommended some years ago that slash be mulched and spread. In addition to reducing the fire hazard this would have the additional benefits of decreasing water pollution and making nutrients more readily available to the soils.

Overfire protection and inadequate slash disposal on timber sales have created most of the fire problem. Failure to take advantage of fire to reduce accumulation of debris surrounding species adapted to an environment of fire has endangered the once fire-adapted species.

X X Use fire as a tool, not as an enemy.

X X We would be better off in the long run if more fires did burn under certain conditions and at certain times we need to do more in fire management.

X X High--all the elements appear worthy. Judicious and more extensive use of prescribed fire can be applied to fuel management. Weather intelligence, if provided at the level now possible with the state of the art, can be applied in achieving all of the elements.

X X Emphasize fuel management as key to resource system.

X X This is a good goal, but we probably won't make it. Fuel management will be the key.

X X Need more use of prescription burning.

Less emphasis should be put on fighting forest fires and more on fire management. Fire should be used for reducing fuel buildup. More roads should be closed permanently as a method of reducing fire hazards and thus averting catastrophic conflagrations on National Forest lands. Road maintenance and construction also should be minimized.

Prescribed and controlled burning by the Forest Service may also reduce the danger of fires in certain areas.

Feel that there is a need for more research activity directed at the practical implication and effects of prescribed burning. I would also like to see the National Forest System become more involved in prescribed burning management.

No mention is made of probable beneficial results of controlled fires or of research into use of controlled burning to reduce wildfires.

Controlled burning is another subject of which we know too little at this time, as far as hardwood forestry is concerned.

Seems the Forest Service ends up spending a lot of time, money, and resources on "controlled burns" that end up uncontrolled. Accept some snags!

Controlled burning will be closely regulated and executed exclusively by the Forest Service.

In fire prevention and hazard reduction, we note that there is no controlled burning authorization or consideration of the fact that there are certain lands on which a fire should not be suppressed.

What is fuel management and how is it done? If your 200-page book would describe this instead of evaluate for me, I could evaluate as asked!

How are you going to eliminate excessive cost of "standby" emergency fire forces?

X (Reason for supporting moderate level): Elimination of standby forces could result in more destructive wildfires.

Much of our forest acreage now needs fire (at least "natural" lightning-caused fire) rather than protection from it.

None of the alternatives indicate a distinction between fire dependent ecosystems and fire damageable situations.

The Forest Service must broaden its views Service-wide in accepting forest fires and wildfires as ecologically acceptable in fire-indigenous environments. The total exclusion of fire as suggested in EPFF is unacceptable; the funds for all-out fire suppression might be diverted to more intensive research concerning fire behavior; fire management (rather than control or liquidation). Fire prevention may be accentuated by closure of roads that are insignificant during fire seasons or year-round.

This activity should be dropped and another substituted, as follows: The Position of Fire in Forest Management. Fire is an instrument in both forest and range ecology. It is indispensable to the maintenance of certain biotic communities. At the same time, there is no doubt that fire, especially that which is man-caused even if we should decide to accept natural fires, is very destructive in terms of timber potential and economics. In addition, there is the potential of great destructiveness because of the results of our Smokey Bear policies of the past. I speak of the accumulation of inflammable material in the form of fallen and dead vegetation and undergrowth. Thus, our policies of the proximate past tend to prevent our adopting a new policy for fire without some form of intermediate determination. It should be the function of intensive research to put the entire problem in perspective and to break it down into its components.

In spite of the reports on studies, I think that it would be hard to justify fire control expenditures in the Southwest on the basic risk of actual damage to the resources. An example is the recent buildup in

presuppression on the Coronado. There are whole Divisions of that Forest that could burn periodically and better meet the public needs by controlling brush. I am sure that smaller expenditures would be more beneficial if spent on reseeding desirable species after the fire.

Critically review fire control policy regarding brush, desert, and grasslands. Too many dollars are spent protecting something of dubious value. Review actual loss in these types and adjust suppression activities to be commensurate with values.

Letting forests burn in most cases is a silvicultural necessity except where deliberately man-caused. Practice of letting naturally started fires burn should be followed as much as possible.

Return forest management to natural systems such as allowing forest fires to burn themselves out.

All forest fires are not harmful. Each should be individually treated - or not.

All of these go down the flue with the new "let her burn" policy.

X X Would also urge that extensive research be done on the natural role of fire. Am very much in favor of "let burn" study areas.

X X Nothing said about natural burns here. Should something be said here.

It seems that fire often plays an essential role in forest succession and must be considered as a future management tool.

The need for natural fires and the long-range benefits of natural fires in the ecologic scheme of things in wilderness must be better studied and understood.

Smokey Bearism should be played down or should be used along with an advertising campaign explaining fire's natural role in forests. We would like to see increased use, research, acknowledgment of fire as an integral part of natural areas ecosystems (wilderness).

Don't overlook natural role of fire in dynamics of forest ecosystems; same for prescribed burning. Important information function also needed to ensure that public understands both pros and cons of fire. Is Smokey Bear to be cremated?

Am opposed to suppression of natural fires, which are a vital part of certain forest ecologies and which are often less destructive than fires fueled by logging.

Am very critical of your overall research in the sense that this Research Program did not mention or consider the role and function of using natural fire as an integrated factor in stabilizing and making the forest community more complex.

Isn't it more economically and environmentally appropriate to permit fires to burn naturally unless they threaten developed sites?

Natural fires should be controlled only when they endanger human lives.

In fire detection and suppression, we would recommend there be added a provision that a fire not be suppressed when it begins on certain lands, but that the cost of fire suppression be invested in seeding such lands to restore vegetative cover.

Selection of high option applies only to man-caused fires. Natural fires must be considered in an entirely different light.

Do not agree with Park Service program of letting wildfires go unsuppressed. Controlled burning is a different matter.

Fire management research needs expansion. Prescribed fire, controlled burning, and acceptance of some wildfire is reasonable and probably desirable.

If utilization is improved, then fire hazard will be reduced. Wilderness fires and fires on poor sites should be allowed to run course. An increasing use of control burns should be considered both as a management tool and as a means of reducing hazard.

X Research in this area may produce a greater information base useful for timber management and vegetation management systems.

X Much hazard reduction could be accomplished by the Youth Conservation Corps.

Possible need to treat fire as a separate system--due to fact that all the resource systems are affected.

The EPFF should describe the cooperative forest fire control program, indicating what geographic areas it covers and what investment by the Forest Service in manpower and equipment it requires.

The building of trails and other access into unroaded areas, even for fire control, is not acceptable.

Audubon reports that many snags are being removed to help prevent fires, and in some cases, wildlife habitat is destroyed and in other cases potential habitat is eliminated.

Educating the public more is also a good idea. There are too many careless people.

X X These programs can only be accomplished if the public is informed.

Would like to see the Forest Service inform the public that if convicted of starting a fire, the cost to suppress that fire will become the burden of the person convicted.

More programs to educate the public (potential users and visitors) in fire prevention techniques; proper ways to build and extinguish fires; how to report and fight forest fires.

I think that the Forest Service should be commended for doing a good job in trying to educate the public to the hazard of wildfire.

- XX Let's educate the public so that they will still help us prevent disastrous wildland fires, yet at the same time, approve of controlled burning.

All the research activities would be lead to very interesting aspects. Even more, here we have to take care of human lives involved in such field works.

High option sounds good but does not say how these results will be obtained.

Firefighting costs can also be reduced through fiscal procedures which give more emphasis to financing preparation before the fire starts.

Against burning and firebreaks within wilderness areas.

- XX Prevention should be emphasized and funds increased at the field level not in the research area.

- XX A varied field experience in fire control will help a person to do a better job than knowledge gained from the work of others. I do not believe prevention and control of fire can be easily quantified and made easier by laboratory research.

- XX The dollars spent need to be measured against the return.

- XX The low supply alternative appears untenable in that it permits a 20 percent rise in numbers of wildfires. It appears inconsistent in that it indicates an 80 percent increase in costs to control fires. The medium alternative is the minimum acceptable one.

- XX Fire suppression is the same as war; one can bombard the target from the air but ground forces must take and hold the ground. Research can be easily overprogramed in this area. Research results tend to increase costs rather than reduce costs today. Programs should be held to basics and RD&A type approach.

- XX In item 1m, "sharp increase" should be replaced by the specific percent increase for more direct comparison with fire increases. What is "minimizing" costs--nice, but nothing to get a hold on.

It will be difficult to develop means of reducing man-caused fires without eliminating man from the forest.

- XX Believe this can be done with regular Forest Service personnel much cheaper than is done by research personnel.

XX I think the "high" alternative can be accomplished with moderate activity and financing.

Study of suppression systems should be integrated with overall fire protection programs and integrate resource management, land use, and social and economic values.

Can't Forest Service personnel be given the authority to fine the public who litter, destroy trees, property, are careless with fire, and camp improperly, etc.?

Don't cut back on people at the job. I don't understand how you can try to hold fire damage to the present level unless you prevent it, but that costs dollars. Employ more people to work for the forest, than against the forest.

XX Combine with fire prevention and hazard reduction.

Would like to see considerable work done in the field of hazard reduction rather than increase in manning and standby equipment.

RESEARCH - Fire Detection and Suppression

X X This has been a fruitful area of research in recent years but such items as infra-red scanners for detection need to be protected and their usefulness expanded. In some areas of the country "sleeper" fires are the most destructive and troublesome. If these could be detected early, fire suppression activity could be significantly reduced. Fast transporting of crews and equipment to fires in rough terrain is also a high priority research area.

X X Needed to improve efficiency and reduce costs.

The faster and easier fires (man-caused) are detected and suppressed, the cheaper it will be and the lower the danger will be for management and people.

Money is now wasted on these activities. Forest Service is obsessed with fighting fire.

X X The dollars spent need to be measured against the return.

X X Intelligent choices cannot be made without knowing what tradeoffs are necessary.

X X At the present and foreseeable future, I feel the high alternative tends to lean toward a point of diminishing returns.

X X Much difficulty will likely be encountered in holding costs down, due to necessity for standby in strategic areas, more overtime needed to stay within wage and hour laws, and continued high inflationary trends. It will be difficult to improve equipment and techniques substantially because of inaccessibility of much areas requiring excessive travel time and hand tools.

X X Cost efficiency emphasis needed.

X X The Forest Service is paying far too much for the relatively inefficient equipment that it has. This is due mainly to people who design the equipment and are also not really qualified to say what we need on the ground.

New satellite systems and increased use of remote sensing will improve detection and attack systems and will not require Forest Service support.

X X Emphasis on rapid detection systems.

X X We could probably get by on less if forced into it. New developments have never contributed that much to reduction of fire. However, it is important to continue the search for more effective ways of doing the work.

X X High. The elements listed are worthy, but ought to include also the developments of weather predictions of critical wildfire situations which would include advance warnings of the situations, frequent updatings of warning information as the situations materialize, and close coordination between control forces and forecast personnel when fires are in progress.

Detection and initial attack are the keys to holding fires to small sizes. Improve the reliability of detecting lighting fire starts by using heat sensory devices from the air.

In our area (South Dakota) local fire suppression crews have shouldered a large amount of the fire detection and control which indicates local control is still a very desirable route to go.

Only I can't see that replacing lookouts--5 or 7 with a recon plane is very smart and probably more expensive.

X X I personally think we are now doing too much too often in detection and initial attack. We should look at our backline policy and initial attack of all fires. We fight all fires as they would consume the whole United States and I think we have the expertise now to predict many fires.

All motorized equipment (including chainsaws) should be prohibited on fire suppression within Forest Service wilderness areas.

Although I certainly support research which would lead to more effective suppression of fires when necessary, I would hope that naturally occurring fires in uninhabited tracts of National Forest land be permitted to "burn themselves out" the way nature originally intended, inasmuch as fire is just as natural a part of our environment as is anything else.

By using natural fires with control measures on "standby" status some forest disclimax ecosystems could be maintained.

Not qualified to speak on fire ecology and value as a management tool. Believe personally it is an important part of the forester's weaponry.

Our natural environmental situation has changed to the extent where fire in many instances is needed for good timber production, wildlife management and even recreation enhancement, as well as protection from catastrophic uncontrolled fire which can come from judicious use of burning.

X X Fire suppression forces are already efficient. The increase should be in strength. Identify areas where fire would be beneficial.

X X Detection systems for the most part are quite efficient--not a high priority problem.

X X Stronger NFA leadership and Regional accountability can do more for us here than Research. We are leaning on Research to accomplish jobs we know how to do--it's a matter of "getting on with it."

X X This area of research has been going on for a long time and has been apparently well financed. It may now be time to give a bigger chunk of the pie to other areas of research that have not previously been as fortunate or for that matter were not even previously recognized as problems worthy of research.

Think that some fire lines and trails are environmentally damaging and should be done with more care.

Most long-term damage occurs not by fires themselves, but by the suppression techniques and by salvage logging after the fire.

Methods of suppression that are easier on the soil and vegetation should be developed.

Believe that more research should be done to analyze the data on the relationships of fire ecology to the natural system. With this information on fire ecology synthesized and quantified, a system of establishing vegetational zones could be conceptualized into a framework for identifying those zones susceptible to fire.

Need more emphasis on the effect of weather patterns on fire.

X X Expand high to aid the following: Apply knowledge to protecting lives in light-weight residential buildings.

X X Would urge that emphasis be put on fire management rather than fire control.

X X High cost of suppression justifies more research. Priority should be given to fuel management and fire fighting technology.

X X Combine with fire prevention and hazard reduction. There is quite a bit of duplication.

X X Many of the items; e.g., "minimizing escalations of....more efficient technology" in moderate level of previous subject, really seem to belong here under detection and suppression.

X X My personal desire is that we perform adequate stewardship of public lands by use of studies and the "Inform and Involve" program of the Forest Service Service. I read the highlights and generally agree to the moderate supply alternative.

More programs to educate the public (potential users and visitors) in fire prevention techniques; proper ways to build and extinguish fires; how to report and fight forest fires.

X More people in the woods will cause more fires but there will also be more people to report and correct them.

Continued research is desirable in a land which continuously destroys more wood than is replanted.

X This program is good if money is available.

X X If we had a blank check, manpower and funds, experience has demonstrated that time required to train scientists, gather and evaluate data would take from 25 to 100 years for us to hope for the results outlined, by then its time to start over.

Fire fighting is on the whole, efficiently handled at the present time.

X X Both from the standpoint of resource losses and personal losses, we cannot afford the losses we are sustaining through fire.

X Increase number of fire management areas.

X X Better training is needed by Forest Service employees in order to become effective fire fighters.

Restore "hit them while the're young" policy of fire suppression. Presently too much reliance on aircraft for detection and suppression. Result is late detection, slow suppression action and big fires. Get fixed detectors and firemen back on the job. With all the roads and vehicles you now have, large fires should no longer occur. But they will so long as you take a look for fires once or twice a day and then scream for jumpers and retardant. That's just not good enough and the public is saying so.

Still don't have a very accurate system of determining actual fires danger-resulting in over-manning some days and under-manning on others. We can probably expect some more improvement in fire prevention by the public. However, with the increased use it would seem unlikely we can hold number of man-caused fire at the present levels.

RESEARCH - Recycling Sewage and Effluent Waters

This is a nationwide issue that cannot be limited to research in the Northeastern and Lake States areas.

Water quality needs are nationwide and area limitations seem unreasonable economy.

X X Opportunities in the West may be limited. For eastern forests and some more populated areas as in the West, perhaps high level would be appropriate.

It seems that municipality aid is inappropriate unless public forest products are contributing to low water quality.

High option should be of great value to municipal, county, and regional governments and planners. Some of these are already recycling wastes for irrigation--such as Clark County, Nevada.

X X Realistically, we will never be funded to reach the high alternatives. Most of the data, we need to act is already available and what we need are funds to realistically use this knowledge.

X X Costs should be met by those benefiting from the program.

Can be done cheaper by crash program.

X X Lack of information on overall costs makes choosing an alternative difficult.

X X Enough time and money spent here for now.

We already have the technology to do each of these items.

X X Research projects should not be considered completed until findings are implemented in everyday National Forests operations as is appropriate.

X X Will low and moderate be accomplished without guidelines?

X X Important to help stabilize the highly fluctuating forest industries.

X X If we're going to tear up the country, we ought to learn how to put it back together.

Think that the portions dealing with "esthetic improvements...open space preserves and greenbelt areas" and "develop guidelines for greenbelt fuelbreaks for fire protection" belong in other categories such as "Environmental Amenities" (page VI-29), and "Fire Presentation Hazard Reduction" (page VI-26), respectively.

This is not a program for the Forest Service--Manage the Forests.

Would like to see objectives modified to restrict Forest Service activities to those dealing with the land, water, and trees. There are other agencies with capabilities to deal with municipalities and their problems. The United States Forest Service shouldn't dilute its basic responsibilities.

- X What about the duplication of effort underway by other Federal and State organizations including private industry and colleges/universities. Should we take over, or supplement efforts?

Agencies charged with pollution control should be involved in the basic research with the Forest Service testing the use of the sewage and/or effluent on forest and rangelands.

Use recycling sewage money elsewhere--not a forestry function.

Force houseboats to clean tanks at disposal centers only.

- X Statement needs more emphasis on recycling wood and fibers into useful products to conserve timber resources. This, not municipal sewage recycling, should be the focus of Forest Service recycling research.

- X This is a high priority project nationwide and is being researched extensively by other than Forest Service. The Forest Service needs to work closely with these other researchers by providing their input and making their needs known. One real current need is the development of efficient economically feasible sewage disposal systems for back country recreation sites where present methods are ineffective for one reason or another.

I am not pleased, however, at the prospect of artificially high levels of fertilization of forest and rangeland, or of diversion of water from natural watersheds for irrigation purposes.

Hate to see one region have its water directed into another deficient region.

Do not support large scale irrigation projects which will lower water levels in lakes, rivers, and streams.

Flooding will be accepted as a natural occurrence in a healthy ecological community. Areas prone to flooding will be kept free from manmade artifacts which might be lost or damaged. No projects such as dams or ditches will be initiated.

- X Essential, if we are to deal effectively with our nation's massive waste disposal problems.

- X This saving and proper use of our water resources is basic to human life so should be given a high priority.

- X Must learn to use the waste water, not waste it.

X X Recycling research should include animal wastes as well.

Believe the salvation of much of our rivers and lakes is in the on-land disposal of wastes.

Recycling and reusing various waste material on forest and rangeland is a good way to increase the productivity of these lands.

Effective waste treatment is very important and should be perfected in all Regions in order to protect water resources.

If use of effluents is planned to increase productivity, it should perhaps be restricted to or concentrated on agricultural and private rangelands.

This idea could turn a problem into a resource, the possibilities are the greatest. This resource should never have been drained in our streams and oceans.

The Forest Service should get into the sewage problem only as necessary to take care of waste generated by use of the forests, or to use municipal waste to restore mining damage to forests. The same applies to land-fill.

We need to be reusing and recycling all our waste as much as possible. Impacts, however, should be thoroughly researched and considered, as well as possible limitations of the capacity of sites to absorb wastes (i.e., heavy metal concentrations).

X X Take advantage of the increase in development near forests that will probably come with increased populations to increase the number of sewage disposal plants that use effluent or sludge on forests.

A good project to utilize resources and increase production.

Where costs wouldn't be too high, the use of treated sewage for irrigation would be beneficial.

X X I'm not certain forest and rangelands need to be the recipient of municipal and industrial wastes, but if so, why shouldn't this subject be a part of our range and timber research programs?

Valuable components in sewage and effluent waters should be saved and reused

Efforts should be made to return nutrients to the land rather than into lakes and rivers.

A high priority here should be research on the use of sewage as fertilizer on forest lands.

High option: Provide means for research and development of anaerobic generators for production of methane gas and/or methanol on grasslands open for grazing, using the available animal manure as a fuel supply.

Other countries have been utilizing these waste products for many years.

The "newly" discovered Clivus Mitrum waterless toilet should be put in any new recreation facility in National Forests instead of the conventional toilet. Compost can be added to natural material.

X Satisfactory method of human waste disposal for wilderness— Wild Rivers has not yet been found.

All need sewage systems should be tertiary unless methods for the use of sludge can be found.

This is a long overdue program and an excellent idea. Research should be careful to make sure that various viruses such as polio and hepatitis do not survive treatment systems and possibly contaminate the ground water. There could also be a problem with pesticides and herbicides as well as with chemicals in industrial waste.

If you can prevent dumping phosphates into our waterways.

It would also help if the general public could be made truly aware of what you are already doing--and planning to do--in helping to solve critical recycling of sewage effluent. It was not until reading a recent issue of "New York State Environment" that I even knew of Forestry Service interest (much less progress!) along these lines. The steps being taken to reclaim 200 acres of Illinois acidic stripmined land is NEWS!

High option should include an intensive public education program explaining how effluents are absorbed by the land and biodegraded naturally. Full knowledge of the process would reduce public resistance to such programs dramatically.

X Lack of information on magnitude of total needs makes choice of alternatives difficult.

Avoid future errors such as allowing larger ski resorts (Congress, nor U.S. Forest Service), or building high standard roads near private inholdings.

RESEARCH - Reducing Impacts of Man's Activities

Less toxic pesticides are not removed by any present treatment methods. Millions of pounds of herbicides and pesticides are drained off the land, enter into the streams, traveling great distances, killing plant and animal life on the way.

The protection of the total environment requires the elimination of all toxic chemicals.

- X X Studies of toxic pesticides and effects of air pollutants need more attention.

We fail to see how substitution of pollution tolerant species for less tolerant species produces an improvement in environmental quality.

- X X Don't worry so much about trying to get trees to live in such outlandish places as Angeles and San Bernardino National Forests. Too costly for any reasonable purpose. Let the local polluters get by with whatever shows up as "residual" vegetation.

While the use of trees to ameliorate atmospheric contaminants is truly an admirable goal, careful planning is necessary to prevent one or two non-native species from taking over where native species had predominated previously.

References to stream pollution should be clarified. The Forest Service should not even think about using channelization method on streams.

- X X Good emphasis program. Question whether it is reasonable to prevent all siltation of reservoirs and entrophication of lakes.

- X X There is a critical need for the Forest Service and Research to develop as a management tool a model to predict sedimentation and other non-point pollution from forested lands.

- X X Give top priority to abatement of siltation in spawning waters of migratory fish.

As to aquatic life, has anyone checked to what the AEC says of the thermal effects of its discharges and radioactive effects?

- X X Need a better assessment that there is a major problem and better quantification of what is going to be accomplished.

- X X (High) This is one area that has been sadly overlooked for years and if the results of such research could be put into application it is a big step. The public is very aware of the blunders made in the past (pollution of lakes, atmosphere, etc.) and are receptive to any information that will eliminate future catastrophies to the environment.

X What about the duplication of effort underway by other Federal and State organizations including private industry and colleges/universities? Should we take over, or supplement efforts?

X Much of the intended research here could become a part of our other research activities.

Not clear why these considerations not incorporated into respective resource systems, particularly the "Land and Water System."

Should also involve research on what some effects are and alternative ways to do things that have a high impact.

X Expand to include more impacts of recreation, grazing, and timber harvest.

Feel you have omitted research on an area where impact encroaches: A study of zoning within and surrounding National Forests for best forest private land use planning.

X X (At low Alt Level) Devise ways to make unused forest residues available for fiber and energy.

X X (At Mod Level) Reduce the impact of strip mining activities on public lands with plans for rehabilitating mined areas.

X X (At High Alt Level) Provide construction guides for acoustical privacy in efficient wood frame buildings and for energy conservation in lightweight building system.

The research section on Reducing Impacts of Man's Activities should have as an objective, research to reduce adverse environmental effects from introduced chemicals.

The greatest impact from ski development is often not on Forest Service land but on adjoining private land where the concomitant housing, motels, shopping centers, etc., are constructed. Much critical deer winter range in Colorado has been lost from this type of development.

Should emphasize that the aims here, such as reduce nutrient loss from watersheds, reduction of stream pollution, erosion, siltation, etc., can be very cheaply obtained by allowing selective cutting only on public National Forests.

One of the best ways to reduce the impacts of man's activities would be to reduce man's intrusion on the forest environments, thereby reducing the necessity of expensive "restoration" programs, management programs to the degree they are now required, etc.

Don't adjust to pollutants. Support stoppages against the causes of air and water pollution. Off-road vehicles should be discouraged as should motorized boats. Ongoing research as to the effects of logging and road building on forest nutrient cycles is needed.

We know now that the most common cause of stream pollution is road-building and logging. Many proposals have already been made and only lack implementation.

- X X Let's start here by putting binders on the Corps of Engineers and the Soil Conservation Service. It doesn't take much research here to decide that these people have fostered a lot of unnecessary and unwarranted projects on the American people.

Seems that reducing impacts of mans' activities should be a part of all Forest Service activities.

Stress anti-litter programs such as Johnny Horizon.

What about doing something about the philosophy and management practices that cause these problems in the first place? I have the feeling that EPFFdodges issues that have continually appeared in litigation.

The watchword of forest management should not be conservation but improvement of our environment, not for a few special groups, but for all.

I favor diversity in forests in order to support a variety of animals who in turn balance each other's numbers.

- X X Let's aim for elimination of environmental pollution.

These actions are of particular importance in wetlands and marshes included in our wilderness.

This is a broad matter and is covered by other programs already discussed, but man's pollution must be minimized.

Man is such a ubiquitous creature that massive efforts to reduce the impact of his activities on the environment are much to be desired.

- X X Intelligent choices cannot be made without knowing what tradeoffs are necessary.

- X X Don't know the cost difference between moderate high level, but moderate seems to provide fair coverage.

Carry out these steps as much as possible within cost limitations.

- X X This is a high priority need and the sooner it is done the less it will cost in the long run.

We believe this section is mistitled. It should be "Reducing ADVERSE Impacts of Man's Activities."

- X X Research specifically related to Forest Service mission. Forest Service should be lead agency.

X X May appear to be a contradiction in that other agencies should assume leadership in this research. However, based upon past results and the potential impact on overall Forest Service mission, do not believe Forest Service can afford not to for high alternative in this field of research.

Would question the direction of this research program in reducing the impact of man's activities. Why is there a major emphasis towards pesticides? Nothing is said of the human impact of recreational activities, nor the consideration of improving the wilderness experience of users.

X X There is a great amount of public support in this area.

X X Other priorities are higher.

A continuing project which obtains input, sometime on a crisis basis.

X X Only to protect our resources; if man's ways that are needed to increase our potentials are detrimental, then we must live with them somehow.

Try to prevent public outcry against USDA-Forest Service activities such as happened at Globe, Arizona.

X X Page VI-28. Under Reducing Impacts of Man's Activities, start first sentence with "Develop technology to reduce...."

Sounds good in principle, but how practical are the experiments? Would the work yield two or more useful results?

X X Sounds good, but can't really get a grasp of what is said.

Let's instead set a carrying capacity for man as we do for cows - we could call it a MUM for man-unit month, or MUD for man-unit day. Reducing impacts would be an endless job, because man will be thinking up new ways to "impact" faster than you can solve the old ones.

RESEARCH - Minerals Development

More extraction is not needed until rehabilitation is done much better than now.

- X X This alternative (high option) must be used if we are to maintain what credibility we still have. I feel it is only a question of time until public coal in the Dakotas, Montana, and Wyoming is mined. We had better be ready with rehabilitation technology when the time comes. Nothing has been said about oil and gas plus associated seismic exploration which has had and will continue to have a major impact on this district.

Emphasis here should be on the restoration of lands, where mining has been permitted and prohibition of mining in those areas where the damage would be severe or an alternate use would take a higher priority as in the Boundary Waters Canoe Area of Minnesota.

We strongly oppose the restoration of any mine sites which may have a future potential.

Reclamation on strip mined lands has not been a big success. The "plan" advocates irrigation and fertilization to maintain vegetation. Is this "long term" or will it last only for the few years that the companies are stripping?

Surface mining areas can be rehabilitated--see area around Braidwood--also, the Youth Corps and local mineral clubs could help with this.

- X X Research should be aimed at effects of surface mining of coal in the West on: (a) Native plant and animal communities, (b) surface and underground water supplies, and (c) people, communities, and land.

The impact of mining on rural community development is a benefit of mining in most areas.

Favor strict control over mineral leases and mining permits.

- X X Why is so little attention given to minerals management? Are we really that helpless? New regulations mean nothing if there is no money or direction to implement them.

The mining industry should be required to live by reasonable exploration and restoration requirements and we will support such requirements.

Better qualify the statement "to help meet the Nation's energy needs" to "meet the Nation's long-term energy needs." I don't want to crash energy program which is purely exploitive, prodigal, and short term. Also, be certain that the " while protecting important environmental values" gets equal emphasis with the extraction concept.

Under high option: Is this a statement of policy or a need for research?

X There should be no exploration and extraction of any minerals until it can be absolutely assured that such exploration and extraction does not result in any semi-permanent or permanent damage to the land.

Opposed to extraction of energy rich materials from National Forest lands. Extraction of coal by strip mining and the removal of oil shale, in particular, are incongruent with protecting environmental values.

The Forest Service doesn't belong in the mining business, especially in wilderness and defacto wilderness areas. If enough minerals can't be found outside National Forest boundaries, then we are really in sad shape as a people and as a Nation.

The Forest Service proposes developing criteria for minimizing environmental and socioeconomic impacts caused by mining developments. But proposes no such criteria for logging--one wonders at the Forest Service's sincerity.

Why not a project to encourage mineral discovery and development with proper environmental constraints?

We have serious reservations regarding the item for exploration and extraction of minerals within National Forests.

The statement: "allow exploration and extraction of needed minerals to help meet the Nation's energy needs while protecting important environmental values" is too vague and needs further explanation. Since much of the mining is conducted on Federal lands, it would seem to be in the public interest for the Forest Service to take the initiative in development of programs to conserve mineral resources.

We would like to see a minimum exploration of needed minerals to help the energy needs of the Nation.

X X Where restoration is anticipated to be difficult, strip mining on National Forest System lands should be prohibited.

Strip mining should be prohibited on National Forest System land, at least where coal is concerned. In the western States where there is a considerable quantity of coal, strip mining is a real possibility (a fact in several areas). However, this coal which is reputedly low-sulphur, is not a fact.

Feel that mining operations, and especially surface mining (open pit, strip) generally have no place on National Forest land. Any proposed operation should require an EIS prepared by the Forest Service. The EIS should then determine whether or not the project will be permitted and under what conditions.

X X Practices such as strip mining, placering, dredging, and other destructive practices should not be done.

Opposed to shale exploitation in the western States.

Do not approve of the way they mine now, it is absolutely devastating to the land, especially out in the beautiful west.

I am against surface mining of any kind in the National Forests and on other public lands.

X X We must reduce strip mining or else make the companies who do the mining restore the land they have damaged.

I don't want strip mining and I'm in favor of finding ways to reduce the demand now instead of trying to fulfill it with an ever-increasing supply.

Mining should be given a lesser priority except in times of national emergency. The forest ecosystem must not be sacrificed to our short-term energy needs.

X X Also include - determine compatibility of strip mining in the Appalachians with long-term use of other resources - elimination of strip mining on National Forests in the Appalachians.

Considering the small size of mineral deposits, and their scarcity, compared with the vast territory in the National Forests, there should be no restrictions, except to spread the waste rock around so the trees will grow, except steep hillsides.

X X With the spectra of strip mining in the Western United States, we will need all the help and knowledge we can get and develop.

I favor surface mining provided proper regulations as to rehabilitation of area, supervision of areas, and proper regulations for access roads and railroads, etc.

With present mining laws, how can Forest Service not allow exploration and extraction? Strongly support protection of environmental values.

The Humphrey-Rarick Bill should not be considered a requirement upon the Forest Service to devote increased attention to renewable resources at the expense of mining.

We are concerned that the entire plan places too little emphasis upon the importance of minerals on National Forest lands. We believe that Congress has made it abundantly clear in the 1897 Organic Act (16 USC 478,551) that the national policy of encouraging mineral development continues to apply to National Forest lands.

The U.S. Forest Service is not capable of and is not authorized to determine the need of the Nation's minerals. The mining industry has a right to prospect for and develop minerals in the National Forests. This is not an activity that the U.S. Forest Service can "allow" or forbid under the present and anticipated future mining laws.

X We have considerable knowledge; now all we need is legal backing to do it.

This should include work toward the revision of our out-dated mining laws.

Revise mining regulations on public land to allow for Government control of resource extraction--leasing this land to companies (not selling or exchange or offering).

Mining programs suffer from the 1872 Mining Law. Until the 1872 philosophy is erased by an adequate law, environmental actions will mostly result in small cases against small miners.

X X This set of alternatives doesn't make sense--exploration and development will take place unless laws are changed. We should explore mining's adverse effects on other systems.

X X Strongly support restricting and regulating bills now in Congress for strip mining and oil shale mining.

The mineral exploration industry needs a set of rules to work by that are not usable by U.S. Forest Service personnel as a method of exercising their personal philosophical disapproval of mining.

Mining industry programs and regulations must vary with geographic locations and local needs; the establishment of uniform national standards would be unrealistic and wasteful.

X X Enforcement of new regulations would go a long way towards curing this problem.

Withdrawal of National Forest lands from entry into the general mining laws is a negative land use policy which denies the Nation information regarding its mineral supplies and precludes consideration of alternative production strategies.

The thrust of this research should be directed to minimizing adverse effects of mineral developments and developing feasible rehabilitation programs. "To mine or not to mine" will become a moot question as the current minerals shortage becomes more acute and as our Nation emphasizes the national policy of self-sufficiency.

EPFF must come to grips with the economic reality that the Nation depends upon the minerals underlying the National Forests as a source of supply. The sole question for consideration then is the degree, if any, to which the Forest Service should regulate mining. The next draft of EPFF must give greater consideration to mining.

Minerals should not be withdrawn particularly in view of the world-wide situation and future cartel establishments for other resources.

X X I think the energy crisis will force this alternative, so Forest Service should be prepared to deal with it in its long-range program.

The current energy crisis demands that the Nation have a complete inventory and wise utilization of energy resources. Without a complete inventory, it is impossible to establish a total, national energy program.

X X Nonrenewable resources must be researched. If for no other reason to attempt to replace them.

X X Minerals - The Nation cannot afford, both in dollars and in land of resource, to outright prohibit mining in National Forest System lands.

Minerals on public land should be held in reserve until absolutely needed.

X X Let's make sure restoration of mined lands is thorough and complete and that the need for coal and metals is realistic in terms of basic human needs, and not the exaggerated needs of a wastrel society such as we have been for the past 15 years.

Would criticize this research program for failing to mention alternative sources of minerals and by-products; and particularly methods of alleviating the problem of mineral scarcity.

X X Mineral and Energy, p. IV-16, para. 2. It would be a good place to outline the energy possibilities and limitations from wood and wood wastes; with from 30 to 300 tons of slash per acre following timber harvest, perhaps technology could be developed to utilize this as an energy source.

Projections of mineral demand seemingly disregard the increasing difficulty of obtaining minerals, and the diminishing purity of those obtained. For this reason, minerals at the junkyards will be more easily reached and extracted than at most National Forests in the future.

THE FUTURE - 100-200 plus years from now, we may be in desperate need of minerals for survival.

Discuss alternative mining methods.

Since this country wastes 40 percent of the energy it uses each day, we should not be encouraging this waste by extracting more minerals. More conservation measures are needed. It is ridiculous for the Service to spend millions to reclaim these areas later, when it is not necessary to destroy the acreage to begin with.

In connection with this work, more should be done to learn how to recycle materials now destined to garbage pits.

Energy conservation is not mentioned. I feel that the EPFF, if it is to benefit Americans, should contribute as much as possible to the conservation of energy.

Minerals are nonrenewable and thus should not be exploited until serious attention is given to recycling minerals already in circulation.

We should not give away the mineral resources until we have mastered solar energy and wind power, not to mention recycling consciousness.

- X More research should be placed on existing problems and causes, rather than correcting the effects of mineral exploitation.

Prospecting should be encouraged, especially as a hobby.

Mineral exploration should be allowed with minimum regulations for the protection of surface resources and conservation of mineral development, except in specific areas wherein surface use is incompatible with mining. In most instances, minerals carry a higher value of use than current surface use.

- X Intelligent choices cannot be made without knowing what tradeoffs are necessary.

Exploitation of these minerals will not only reduce the cost of goods and services in this country (and hence inflation), it will reduce the balance of payment problems with our neighbors in the world community.

Mining cost (consumers) should pay this cost of mining--not general taxpayers.

- X Particularly important to such areas as northern Arizona. Costs should be carried by industry to the full extent legislation will allow.

Fair market price as well as social costs should be included in price of leases.

The EPFF position on mining is confusing, and in some cases, misleading.

- X X The alternatives are pretty fuzzy. No clear-cut increase in output for high level.

It appears that the mineral resource has not received adequate consideration in land use planning and the development of this program; as a result, long-term mineral sufficiency could suffer.

The overview of the mineral resource, including its management and the surface mining problems, seems too overly generalized as to be meaningless in any program evaluation.

- X X There's nothing in the document about oil shale. I assume there's some of this in the National Forests. If developed, its affects will probably be similar to strip mined coal sites.

The EPFF should describe fully the different mineral resources, the extent to which they have been developed, and the Forest Service's policies for allowing, promoting, or discouraging future development.

The U.S. Forest Service will need to increase their budget if the intent is to physically rehabilitate mined areas. It would appear to be a proper U.S. Forest Service function to provide long-range management of rehabilitated land. The impact of mining on rural community development is a benefit of mining in most areas. This may not be a proper U.S. Forest Service function. This sounds like big government telling private enterprise how to run their business. The U.S. Forest Service does not have the capability to do this job and the end result could be to say "No" to exploration and development of needed minerals. Possibly provide guidelines and advice, but this could very well be a duplication of a local government function.

The U.S. Forest Service should not be involved in the sociology of mining community development. Nor can it be expected to provide better knowledge, which it does not have and cannot acquire, for "improved administration of minerals development."

We suggest that the effectiveness of this particular program could be enhanced by closer coordination and working relationships with other government agencies having expertise and/or jurisdiction in the mineral resource field.

We question whether the Forest Service should attempt development of "extraction systems that reduce or prevent unacceptable environmental effects." We suggest that discussions be held between Forest Service and industry personnel to clarify this portion of the EPFF. The draft states that research activities related to mineral development are to provide the mining industry with new techniques for the design of mining operations, new methods for rehabilitation, new mining technologies, and environmental stewardship criteria (p. A-43). More specific information is needed in order to understand how such ambitious programs are to be undertaken, and specifically what research will be conducted to produce these new answers. Again, we believe that there should be considerable contact between Forest Service researchers and industry personnel before such programs are undertaken.

The U.S. Forest Service would allow "exploration and extraction of needed minerals." The U.S. Forest Service has an opportunity to veto, for specific compelling reasons, applications for prospecting permits and leases, but the authority to issue and administer these rests with the Bureau of Land Management and the U.S. Geological Survey.

With a few exceptions, it is not clear from the document that responsibility for the Federal mineral resource on all Federal lands including the National Forests rests with the Department of the Interior.

At several places within the EPFF, the writers of the draft refer to the U.S. Forest Service's role in mineral management (e.g., pp. III-13, 14, and VIII-15). Some of these statements assume that the Forest Service has the authority to answer the questions posed in the EPFF. We suggest that it is Congress rather than the Forest Service that has the power to answer the questions asked on p. III-14, and that they have answered these questions definitively in the 1897 Organic Act, as follows: Any mineral lands in any National Forests which have been or which may be shown to be such, and subject to entry under the existing mining laws of the United States and the rules and regulations applying thereto, shall continue to be subject to such location and entry, notwithstanding any provisions contained in §§ 473-482 and 551 of this Title, 16 USC § 483 (emphasis supplied). The Forest Service recognizes that prospectors and miners have a statutory right, not mere privilege, under the 1872 Mining Law and the Act of June 4, 1897, to go upon and use the open public domain lands of the National Forest System for the purposes of mineral exploration, development, and production. Exercise of that right may not be unreasonably restricted. Specific provision has been made in the operating plan approval section of the regulations charging Forest Service administrators with the responsibility to consider the economics of operations, along with the other factors, in determining the reasonableness of the requirements for surface resource protection.

Consider mining and minerals a different resource system--What duplication exists between research efforts of Forest Service and other Federal agencies?

X X Ways to extract needed minerals while protecting important environmental values should be researched by the mining industry and colleges and universities with mining engineering schools.

Define role of BLM.

The Forest Service is not in the socioeconomic business with regard to mining and does not have the personnel or authorization to develop engineering procedures in mining.

X X Minerals development should be quantified or at least correlated with alternatives outlined in the Land and Water System.

Personal observation has shown where prospectors with no genuine intention of mining build themselves a nice home and tear up the countryside with test holes and resultant soil and terrain detriment.

Terminate fraudulent mining claims and those in highly sensitive areas.

Any held in revegetation methods and erosion and prevention of stream sedimentation that the Forest Service can provide to the mineral exploration business will be mutually beneficial.

X X The "high" alternative is already provided for by NEPA--if miners can't do it right then don't let them do it. "How" is their problem, not ours.

Concept of mineral resource development is not compatible with historical practice, national policy, or in the best interest of the Nation.

Federal Government and the States should make studies to determine where emergency stockpiles of fossil fuels can be stored on Federal or State owned lands for use in national emergencies.

Add to explanation, "permission for mineral or rock club members to look for specimens." Sometimes they thus make startling discoveries.

The dumping of overburden into drainages should be absolutely prohibited.

Evaluate or discuss impact on water quality--wildlife.

X X The minerals are not a renewable resource, so if they are not discovered and used immediately, they will still be there to use later.

This is a management activity, not a research option. Research won't get around this problem--it's a question of values, not techniques.

Plans should be made to acquire mineral rights which are owned by others and are located under public lands (both Federal and State), especially in sensitive areas or those being considered for wild or natural areas.

All mining in the National Forests should be done as underground mining, with the mouth of the mines outside the forest as a general rule. No strip mines on National Forests. Eliminate mining in wilderness areas.

The EPFF should ensure environmental protection and the extent of the Forest Service's direct supervision over mining operations.

On the same (VII-9) page, it is pointed out that the Forest Service SEAM project is included in the high supply alternative. Why is not SEAM included in the low and moderate supply alternative since it currently is operational at Bozeman, Montana, to the tune of about 2 million for FY 75?

As far as extraction of metals is concerned, I think alternate or synthetic material should be developed so as to not totally deplete the earth of valuable minerals.

RESEARCH - Environmental Amenities

X Add methods of quantifying scenic values and better ways of handling landscape aesthetics in land use planning from high altitude. Much work has already been done on these two items - we need a program for implementation.

X Methods of quantifying scenic values are needed to adapt to computer handling of such complex tasks as land use planning. New ideas are needed for reducing wind erosion, etc. Research should be geared toward developing new and better methods than shelterbelts or other presently accepted methods.

Emphasis on landscape design in all alternatives seems to imply that we are to have more of the same clearcutting practices with only an attempt to "pretty them up." More than this is needed as "design" is only part of the problem. We need to deal with alternatives to clearcutting.

This program might be important from the standpoint of establishing man's impact on the various ecosystems and in establishing methods for avoiding the impact. However, I cannot buy landscaping and other wholesale modifications by man to remedy the situation.

Should deemphasize landscaping but rather encourage keeping the land as naturally as possible.

More work is needed on how to manage "wilderness" and testing of ways to provide primitive transportation (hiking) along with extensive timber management or an alternative to "wilderness."

X The item about managing visitor use in wilderness appears most important to me since this is a matter of personal interest and is becoming a problem in the Gila Wilderness area.

Add: to High Option - greater restrictions on wilderness area use - no ORRV in these areas.

If less were said about wilderness and wild rivers, the Forest Service would not have so much of a problem.

I'd sooner see more roadless areas and "intermediate recreation areas" permanently protected.

Management of the wilderness itself should be minimal, however, guidelines for use and numbers of visitors are needed. "Guidelines for preservation restoration and controlled use of fragile desert environments" should not be limited to desert ecosystems.

X X It seems out of context that a forestry agency should attempt a definite study of desert ecology.

The desert is a grossly misjudged area. Perhaps study concerning the desert would help open more of it up. Let's face it, there is lots of desert for man to enjoy out there.

X X Several of the items listed are not what I would consider to be amenities - specifically, shelterbelts in the Midwest, avalanche control systems, and desert ecosystems.

Why avalanche concerns? They should be recognized as a natural phenomenon and attempted use of sites avoided.

Forget about the shelterbelt program and making it any better. If the trees are not reproducing, God did not intend them there.

X X Need to answer economic questions involving these types of problems.

X X This is a big plus (+) with everything to gain and little to lose.

Carry out as many items as possible in this area within the limits of reasonable financial expenditure.

Wilderness should be exactly what it states and we should care very little about how many people go into wilderness because you cannot put sideboards on wilderness activities and still keep wilderness experience pure.

Need much more protection and understanding of desert ecosystems.

Desert ecosystems have been long neglected and are overdue for attention.

Much of what is mentioned under each of the alternatives is already known. What is really needed is to find ways to put existing knowledge into use.

No sense in spending a lot of money on research when you don't even have enough money to police the campgrounds you now have.

Would suggest that you compliment your research efforts by synthesizing and indexing all of the wilderness and roadless areas into a quality context based on the characteristics of: (1) the study and classification of vegetation; (2) scenic attributes; (3) the remoteness and size; (4) visitor use and impact; and (5) wildlife and endangered species. The respective information and feedback can be used as a policy and management forum for establishing principles and concepts for the management and administration of wilderness areas.

This activity should also consider "development of guidelines for preservation, restoration and controlled use of fragile mountain environments (outside of wilderness) such as the Idaho Batholith.

New management techniques are needed to develop acceptable levels of environmental amenities without locking up millions of acres containing valuable resources needed for this country socio-economic well being.

This program should have an open end to include elements that are not now listed. The subject intimates that unknown approaches might be even better than those existing. This area has been "forgotten" too long.

Under high option, should also include how to relate these objectives to greater use and provide economic vitality to areas.

X Provide wood construction guidelines to enhance the aesthetics of residential buildings.

Include comparison of alternative harvesting or silvicultural systems-- give special attention to clearcutting practice, and size and location of clearcuts.

X X We try to protect people from floods and avalanches. Why not fire? Fire is as big a potential threat as either of the above.

X X Include alpine ecosystems with desert ecosystems.

Need research to learn more about:

a. the contribution of forests of different age classes, stand structure, and species composition on the oxygen budget in the atmosphere.

b. the effect of trees on climate and temperature amelioration.

c. species and varieties resistant to certain atmospheric pollutants.

Man needs to learn how to live in harmony with his environment. This is not just for the physical benefit to the environment, but for the mental benefits to man which a quality environment accrues.

I chose the moderate alternative mainly because the high alternative seems to deal mainly with the enjoyment of man. I say let's discover what exactly man's impact has been so far and let him enjoy existing areas currently in use.

X X I don't think these are social amenities. They are really necessary if we are to crawl out of the hole we have dug ourselves into. For too many years we have ravaged, destroyed, and ignored our land, air, and water. Now, in order to survive, we must do everything possible to reclaim them.

I'm all for any area where you can aid in benefiting land and water resources.

X X Forest Service should be a model Federal land management agency if this alternative is pursued. The present Forest Service management program is good, but implementation of this alternative would be a tremendous feather in its cap.

X X It's probably right to research "environmental amenities," but that effort will be most meaningful - for most situations - when associated or incorporated as a "part" of other activities.

X X Items listed in this area of research seem to belong under other research areas such as recreation, timber, and range. I do not understand the significance of this collection of research items.

Why not incorporate into respective resource system?

X X The Environmental Protection Agency should be responsible. Forest Service should coordinate with EPA to carry out this research.

X X The present level of research, coupled with that of other research organizations and State agencies, should be sufficient.

Suggest the establishment of visitor-use guidelines be accomplished in this alternative, together with set, (firm) visitor-use limits.

- (X The objectives here border on being platitudes; some form of quantification would be helpful.
- (X I question the integrity of those who prepared this report - it appears that you have stacked the deck to get your way.
- X X The definitions are fuzzy. Work them over until you get distinct differences on the alternatives.

Environmental and scenic amenities have been vastly over emphasized in recent years. Looking pretty is not essential to a healthy productive forest.

Make provisions so that senior citizens and others incapable of hiking or horseback riding could enjoy the forest areas.

Study should be made of transportation systems of National Parks and Forests in other countries.

This is a motherhood item.

Less management and more freedom in the forests and deserts -- we are being "managed" to death.

- X X Appears to be within the scope of capabilities of Forest Service research.

- X X We have a long way to go to use the National Forest lands for resource production and not sacrifice amenities.

Nonrenewable resources, archeological, historical and paleontological values, should be protected and/or developed in relation to other values.

This is an area where modifications will have to be made in favor of wood fiber production for the benefit of many instead of a tiny minority.

High option is critical in the Northeast where the urban and suburban sprawls coupled with industrial development over two centuries have wrought widespread environmental degradation - unfortunately, this seems aimed largely at the west and southwest.

RESEARCH - Recreation Management

Observe people and their choices. The majority by far are oriented to use areas where water in the form of streams, rivers, ponds, lakes and reservoirs are available.

- X X I don't believe we fully understand the needs of "most recreationists. Some want seclusion of wilderness, others want to be around people.

By better understanding our recreation needs, they can better provide the public with the types of recreation it requires.

A clear system of quantifying and evaluating recreation benefits has yet to be developed and applied in a manner that will significantly affect decisionmaking.

- X X We know that one of the benefits for outdoor recreation are improved mental and physical health of American people. There are other benefits as well. We need to be able to quantify them and develop ways of measuring the effectiveness of our recreation program.

- X X "Fundamental work on identifying specific benefits" - what has been done up to now - nothing? I suggest that you review the available literature. Does everything have to have a Forest Service label before it is recognized? Will "Low" and "Moderate" be done without the benefit of guidelines?

There is probably less known about recreation demands, needs preferences and management than any other National Forest resource. Hopefully, research will help ameliorate some of the present conflicts between recreation and other research uses.

We recommend concentration on how much recreation the forests can carry, how much of a beating the land can take, and the planning and managing of dispersed recreation. At present, measurements seem to be confined to PAOT and Visitor Days Use, which we feel distort the picture in favor of mass recreation.

Should try to measure and identify all types of recreation use in National Forests, and also to identify and try to reduce impacts of dispersed recreation.

Forget the "full array of recreational opportunities" and the accompanying inherent problems.

Challenge the National Forest System to show me an archeological or historical treasure that has ever been replaced, repaired, even copied, but never the same.

- X The one item that should be stressed in all alternatives, however, is the preservation of archeological values. This is a real problem in management.

Ask local rock and mineral societies to help with research and identification of archeological and historical objects.

As far as outdoor winter recreation is concerned, we believe the key research role should be played not by a land management but by the winter recreation industry itself.

- X Forest Service must coordinate recreation research with other agencies, but it should not be necessary to assume lead agency role.

More "Boondoggle"? Other Government agencies have managed our railroads into bankruptcy (i.e.c.) our airlines are going the same route (C.A.B. & C.A.F.) our merchant marine is not competitive with foreign flag ships (Federal Maritime Commission) and our current energy crisis results from FPC Policies. Let's not manage ourselves out of outdoor recreation.

Demands and wishes are distinct from need and the distinction should be recognized. There must be a cutoff point (or visitor-day limit) that can be defined.

What is needed especially is (1) continuing monitoring of demand, perhaps at 5-year intervals, and (2) some measurement of the capacity of various areas to provide recreation without severe deterioration of the areas.

- X RIM figures are grossly exaggerated for most forests. Present facilities are probably adequate to the year 2000, but considerable improvement is needed in maintenance and development of sound water systems.

How much of a beating can the forest take:

This should be a study of the effect of man's activities on campsites, trails, meadows, streams, and the adjacent land. It should include research into methods for prevention (physical not behavioral) and restoration.

Identify "visitor environmental carrying capacity." This would permit more reasonable decisions upon how many visitors one would permit in a forest system.

Recreation areas are being damaged severely in some instances from heavy use.

Care should be taken so fragile ecosystems will be protected. Extensive recreational development should not be encouraged.

Recreation should not be encouraged which uses a lot of man-made apparatus; example, ski developments with the forest boundaries.

Fear we can recreate ourselves to death and in the process convert big game range to campgrounds, rivers to stagnant reservoirs and forests to a system of jeep trails and super-highways. Let's evaluate all the resources before we divide them into playgrounds. I would like to see improved methods for preserving archaeological and historical sites.

Recreation areas in many locations are being destroyed by overuse during peak periods. Use limits must be established and their management must close areas when these limits are reached.

We should provide about 3 times as many first-class campgrounds for the vast majority of the public.

Research into methods of making available to the general public some of the superb quality scenic areas of the National Forests are now rapidly being given over to exclusive use for the wilderness minority.

Stay away from too much concentrated recreation. Avoid the Park Service's mistake of over-sell.

X X We have so many sites, government owned properties, and land that could be put to better use.

Only those recreational activities oriented toward a dispersed forest land environment should be allowed.

Don't favor the most intensive use areas - at least, little expansion thereof - encourage more extensive, dispersed use.

Planning and managing dispersed recreation needs high priority. Much of the demand for wilderness does not need wilderness as such. This must not be a substitute but an alternative to wilderness.

Don't include the extensive development of lodges and major facilities in areas that cannot support much human activity.

Intensified research in wilderness management will permit the wilderness of tomorrow to serve many more people than it does today.

X X Dispersed recreation most important in terms of minimizing effects.

I think that the U.S. Forest Service should put the growth of wilderness concept off since it caters to a loud, very small minority of misanthropes.

We shouldn't force everyone to be a backpacker in order to use any of our scenically valuable public land.

X Keep the recreation areas out of our best timber sites. More money for wilderness management.

Urbanization has brought a nearly total alienation of city people from Nature.

Get rid of the archaic fixation on recreation facilities. Start dealing with lifestyles and opportunity concepts.

There is certain to be increased recreational use because of energy development in Southeastern Montana and Eastern Wyoming.

Because of the energy situation, we expect less motorized travel. This does not imply less recreation, but a different kind perhaps.

Because of dwindling energy, recreation equipment which uses energy be forbidden.

X Emphasize access and traffic control.

Strong need to look at man caused impacts on soils and vegetation, particularly in wilderness areas and high R. V. use areas.

High Option: Improve supervision and control of off-road vehicles in fragile environments such as deserts, tundra, and wetlands.

Under high option: Include accessibility factor--

Do research on impact of ORV usage and develop guidelines for ORV use on National Forest lands.

Define research manpower needs, particularly in social sciences.

Will probably need high priority for people management while they enjoy National Forests.

Of even greater importance that the programs outlined is protection of the natural environment so that we may continue to have areas available for high quality recreation.

"The basis for a better mixture of recreational opportunities for satisfying public desires" should not provide for a deterioration of environmental and esthetic qualities.

My personal experience with any personnel of the National Forest System (limited to the State of Colorado) has been the most informative, pleasant and most courteous always! This covers approximately a 10-year period.

What isn't established are the responsible attitudes within the general public towards these resources. Therein lies the danger of opening another "Pandora's Box" and inviting further problems, by encouraging mass use of our forest lands. Don't encourage it.

Use people native to the area when possible.

The Forest Service needs to reappraise the type of educational material used at visitor centers. We need more than the sale of Forest Service programs.

Need to sponsor research in how people learn in outdoor environment. Recent information indicates that traditional classroom and coordinator. Research might not, in many instances, be applicable.

Should do more work in how people use interpretive centers, what they get out of them, and how the centers can be more appreciative.

X X Most public recreation should be considered a luxury, and not a necessity.

Eliminate all parts of the program until country and taxpayer can afford such a luxury.

X X Installation of facilities with low, long-term maintenance costs and skill levels is a key need. Facilities also need to be aesthetically compatible with experience levels to be provided.

This work is urgent but the market probably could not support the "high" degree.

X X Bear operation and maintenance costs in mind in planning recreation activities.

X X Much needed information in this field should come from research, so that a realistic program of recreation management and development will be possible.

Under high option, should also include how to relate these objectives to greater use and provide economic vitality to areas.

Research should be undertaken to determine the optimum camping cluster size to achieve maximum use of Park roadways and trails for bicyclists.

Research should be undertaken to determine the allocations which should be made for additional hiking and bicycling trails in National Parks and Forests. Visitors should be polled to determine what types of equipment they bring with them.

X X Don't feel that this activity will generate much management direction. Will generate nice-to-know information.

Better put the money into maintenance and rehabilitation of existing facilities than into dubious research.

X X Low priority items compared to the basic fundamentals we must consider when funding is done.

X X The three levels are not clearly articulated or distinguished. The list of research problems is rather hit-or-miss. Were researchers in these fields consulted? (As far as I know, they were not.)

Incorporate into "Recreation and Wilderness System."

Many believe we are getting too permissive and making nomads of our imaginative young people.

X X Too many Forest Service administrators and researchers have an over-developed propensity for making the simple complex. This enables them to delay making up their minds.

X X The illusion of precision can be dangerous. Better to keep the options open, particularly on the low-productive lands, as it is a snare and a delusion to spell out in words, or to delineate graphically, an exactitude of detail based on empirical knowledge. Broad intuitive thinking guides action plans in the right direction, provides avenues for future discretion, is more readily understood, and usually will stand the test of time.

X X Planning is necessary, but need it become a frenetic obsession? The ever-changing multiple use plans, on which so much time and money has been spent by dedicated thinkers, is an example of the grand illusion that these are imperishable words to be graven on tablets of stone, before which all shall genuflect to the end of time. How sad. They die in infancy because of complexity, and the more complex, the less understandable.

Feel that the public would appreciate the various activities pertaining to recreation outdoors if they were made aware of up-to-date changes in recreation management.

The statement, "a start on methods of identifying, preserving and managing archeological. . ." does this mean development of new inventory and research methods, or implementation of already existing methods?

Need also historic and archeological survey and protection of such sites.

RESEARCH - Urban Environments

No community dumps or large concentrations of debris or garbage will be allowed on forest land.

- X X Will moderate produce any guidelines for environmental design and modification, or are we going to be forced to select high to get any tangible results?

Local research indicates that more critical than quality of water is the quantity of water as a response of surface alternation.

Improperly treated effluents and discharges will be eliminated. Erosion causing practices will be eliminated and the water quality improved to the highest degree possible.

Urban areas are truly in need of better recreational opportunities. Noise reduction deserves much attention. Private landowners must be made to realize the value of their small woodlands as vital remnants of the ecology of their area and should preserve them, by Federal subsidy, if necessary.

There should be a separate category for small private woodland owners. They comprise 65 percent of the total forest land of the United States and much of it is on better timber producing soils.

Might put some dollars and brains into developing, demonstrating, and selling methods of timber production and harvest from small woodlots that do not offend aesthetically and that can be to the economic advantage of these small woodlot owners.

Decades of farm forestry attempts to sell trees to low income farmers have met with weak success because we may now be heading for an even less success in selling trees to low income urbanites unless we try to understand resources from their viewpoint. In this, as with the farmers, it is naive to assume that the problem is primarily one of educating others to our viewpoint.

- X X This is very important because most of our people do live in cities.

- X X An area of real direct benefit to the majority of people.

Transportation restrictions imposed by economy and energy availability will place added burdens on urban recreation facilities. Citizens not able to travel to rural areas will expect more green areas within the urban environment.

High option is very important in the Northeast where there is relatively minimal access to Federal lands.

Evaluate need for Eastern Wilderness and adequacy of Eastern Wilderness areas. Will designated areas' quality be impaired because of overuse?

Research and development in the use of anaerobic generators for production of methane gas and/or methanol using sewage and garbage as fuels.

Also to be preserved are so-called "scenic wonders." Should "noise reduction" be a primary goal of the Forest Service?

X The information to be researched is important, but appears to be somewhat outside the scope of what the Forest Service should be studying.

X Place emphasis only as it relates to the National Forest directly, such as municipal watersheds, incorporating private owners' objectives and thoughts into land use planning, etc.

X This is an illustration of our need to be better coordinated with other public agencies.

The Bureau of Outdoor Recreation and Housing and Urban Development should be the prime movers in urban environment with the Forest Service and Fish and Wildlife providing their expertise.

X X Goals are agreeable, but priorities are elsewhere.

U.S. Forest Service should not over-involve itself in urban recreation and design. Until you get all your problems solved in the backcountry, don't spread yourself too thin.

Urban Environments Research appears to duplicate many Federal, State, and municipal agencies and would be an added tax burden on wasted money.

Much of this could be done with regular Forest Service administrative forest personnel more reasonable than by research personnel.

Eliminate all phases until taxpayer can afford.

Public education is very important. Forest Service needs public support. Public also needs to know how to appreciate and use their forests.

The city people have finally found the forest. They have not been adequately educated on forest management. Many of the public schools' textbooks and instructors are biased and factually inaccurate. Accurately reeducating a majority of the people is vitally important in accomplishing this intensified forest management program.

X Environmental education is essential for people in urban areas to better understand and appreciate the National Forests.

Why not set up an information center at each Regional Office responsible for disseminating technical information guidelines for environmental design, minimizing adverse pollution effects, and balanced mixture of recreational opportunities?

Include need for Visitor Interpretation/Conservation Education facilities.

X X This is the way to get lots of political support and funds for the investment. Good publicity!

This will make a big hit with all people in and around urban areas. This will be living life to the fullest, maybe even keep people home and get acquainted with each other.

X X The more advances which can be made in this area, the less the impact from these people on National Forest System land.

X X Perhaps the high alternative would be best later on as public involvement increases.

Incorporate under "Human and Community Development System."

X X Many of the projects in moderate and high appear to belong in other research disciplines.

My major criticism is that the plan is almost exclusively directed to areas of the country other than southern New England; for this reason I would hope greater emphasis would be placed on urban environments and areas and access to forest areas by urban and suburban dwellers.

Research is needed to cover fundamental relationships for all woodlands which serve people, including rural and urban. It should not be confined to urban areas and it should include timber. This section does not come to grips with the ordinary small woodland ownerships where all values might be harmonized and integrated.

RESEARCH - Resource Assessment

It seems that once a forest inventory is initiated on a National Forest, it should be in-depth enough to be used as a basis for a while.

- (X) Highly intensive and extensive inventory is vital to proper management. As the national need for wood products increases, the demand for National Forests to supply much of this need will increase. Highly intensified management will be needed. Much of the productive capacity of National Forest land is not being utilized to its fullest.
- X X Frequent assessment of the timber resource is imperative if we are to make rational decisions in a changing environment.
- (X) Inventory and update should be a continuing process, rather than being done in 10-year chunks. Too much tendency to get locked into management plans that are obsolete before next planning period.

Timber inventories should be conducted only as significant improvements in inventory methodology are developed.

Is a 5 year inventory cycle necessary in the South?

- X X Demands must NOT influence the accuracy of assessments.

Look at the political pressures you already have from counties re school budgets. If they had too good a handle on timber inventories, you'd never get them off your back.

Only by frequent checking can we prove that we are or are not depleting a resource.

Would give this program very high priority, particularly collecting data on the National Forest resources and analysis of demand and supply data to guide the formulation of forest policies in the direction of programs.

You could combine the items regarding development of methods for inventorying and the preparation of periodic analyses of supplies/demand for nontimber renewable forest resources.

We obviously need to know how to inventory "nontimber renewable forest resources" since the Forest Service is charged with sustained yield of more than just the timber resource. There needs to be some emphasis on the effect of increased utilization of timber on these other renewable resources.

Required under "Forest and Rangeland Renewable Resources Planning Act"--Why not do a Resource Assessment for each "Resource System"?

It is unclear which components of these three alternatives have already been covered in the Renewable Resources Planning Act.

X X Rewrite this section to incorporate the Resource Planning Act.

In order to comply with the intent of the Multiple Use Act, inventories would have to cover all renewable resources.

X X Pages VI-31 and VI-32. Under "Resource Assessment," the low and moderate alternatives should be expanded to provide inventories of range, fish and wildlife habitat, recreation and water resources, in addition to timber inventories. Analyses of supply and demand for all of these resources should also be prepared.

Add - "Identify commercial forest land in private ownership withdrawn from wood production because of owners management objectives."

Approve of research into inventories and productivity on remaining old growth stands. Should be conducted by systems ecologists rather than timber managers.

No consideration is given to the necessity for an assessment of the mineral resources underlying Forest Service managed lands.

A National assessment of the big game resources on National Forests needs to be made. Currently, National Forests provide habitat for many of the last major big game populations. These habitats are rapidly being destroyed by accelerated road building and timber harvest. The decisions on which areas need special consideration because of the national significance of the wildlife populations must be made at the national level.

The emphasis seems to be on timber. All resources should be included. The timber problem will never be solved on Forest Service land alone.

Your Research approach is too concentrated with policies related to timber resources. This assessment program has developed and kindled a negative attitude and direction to non-timber resources.

Prefer none of the alternatives. There is too much emphasis on timber as the most important of the forest resources. This section appears to regard timber as the only forest resource. This contrary to the Multiple Use Act.

X X Writeup in text is lopsided to assessment of timber resource. Since there are other resources in the National Forests, thrust should be in assessment of those. This field has been neglected long enough!

The addition of cost factors in this report would greatly facilitate making such definite choices.

Need to accurately know the status of all our resources.

We need to know very soon all that is possible to know about this resource in order that many decisions can be made most correctly by various organizations and for different purposes.

You probably need to do most of this because you don't know what you have and how fast you are losing it. Forget the 5-year inventory in the South. Stop trying to manage the National Forests from Washington. Let the ground determine what can be done with it, rather than some governmental imperative.

Periodic inventories of resources at 5 and 10 year intervals are fine but we also need some long range planning. The Forest Service is planning for a decade when planning for a century is needed.

We need what Europe has had for a century - government control over ALL timber harvests; then and only then can the Forest Service PLAN.

X X In light of the knowledge we have now, slowly improving utilization standards and market slumps, this intensity would seem adequate for next ten-year period.

If the USFS can meet the low alternative, it will have accomplished a major job. Unfortunately with the present level of skill and number of people working in this area, this is a virtual impossibility. Major effort is needed in this area.

X X A 10-year cycle of inventory gives us as much useable information as we are capable of making use now.

X X Cooperation with State programs is only implied. The high alternative should be pursued.

X X The plan should spell out the proposed role of the State forestry organization. The nebulous term "state" is not sufficient in most cases.

This research will have to be implemented because it will directly affect the private landowner. It will provide for county-by-county research and this will be very beneficial, for indirectly the Forest Service will be able to influence the 59 percent of the forest-owned by private individuals.

X X Additional emphasis on "in place" data is essential to any level of all programs, if we're going to do the quality job we want.

Less emphasis on increasing board-foot and more on maintaining wilderness area and wildlife habitats.

Knowing what our forests can produce does not mean we have to use those resources.

Forests may one day have to take their place for heat, light, fuel, building and wood industries. The products from forests may be almost unlimited.

X X This is a basic tool in land management.

Increase the use of primary, noninterpreted data, information systems, and information processing.

X X Already operating at high level.

I didn't understand this one very well.

Society has a very valuable resource in our public land. It is increasingly difficult for the Forest Service to manage this resource without yielding to some special interest group such as dude ranchers, hikers, cattlemen, developers, or even the Forest Service itself.

Needs to be some work done on ways to cut demand. Now recycling center can't get a decent price for newsprint. And the price of newsprint keeps going up and papers are swollen with junk advertisements. Something is wrong with this. Is this form and report printed on recycled paper?

Resource Assessment research should include, even under the low alternative, determination of the amount, distribution, and degree of hazard of unstable ground on all forest land.

RESEARCH - Evaluation of Resource Management and Market Development

x "This respondent checked moderate. Investment analysis data is needed at least at the current level.

By "guiding investments" I hope the NFS means it will have complete control over all private interests which seek to make use of NFS lands. Again, "evaluation" should not lead inexorably to usage.

Improve harvesting on private lands. Encourage privately-owned timber farms.

The Forest Service doesn't need to get any closer to the timber industry except to help them more efficiently manage and utilize their own land.

In Southeast Alaska, there is a serious need to revise the present long-term timber sale contracts to make timber available to the few surviving sawmills that would cut lumber for local use.

No improving local economics by exploiting the wilderness. More constructive jobs.

Opportunities for improving local economics through expansion of---wood using industries fails to take into consideration the probability of creating a transient labor force.

Think it is unwise to encourage communities to become dependent on forest crops.

It would be good here if we could also abolish some markets. Especially those for disposables. Thrift is going to be where it is at for the survivors in the future.

Hope you can stress lowering costs and increasing more efficient methods of processing, distributing, sale, and use of timber products.

I don't feel that great emphasis should be placed on creating new markets until we can assure a supply of timber for the present ones.

x x Don't interfere with State agencies until we get our own programs in order and demonstrate that we have something to offer.

x x Research into marketing of forest products is not really the job of the Forest Service. That is industry's job, and what I know about USFS marketing studies, feasibility studies, etc., indicates they are worthless and a waste of taxpayers' money. The marketing of wood products is up to industry--the FS grows trees and other resources. Therefore, I would like to see money now spent on marketing research of forest products diverted into more worthwhile FS research like water, timber, and range research.

We are kind of unclear as to exactly what is meant with a lot of the aspects of this research activity.

Insufficient information to establish priority level.

X X Somehow the emphasis on timber came on too strongly. Furthermore, we may be getting the cart before the horse because--how can we develop alternatives when we know so damn little about the effects of any one of them?

Too much emphasis on timber--include wilderness supply and demand analysis--also potential of recreation developments for improving local economies.

Cease regarding the forest as an economic cornucopia. Develop an awareness of its non-economic values.

We have a lot of management knowledge now, let's put more of the money into practicing what we know (an action program) rather than to continue to spend it all on research.

The Forest Service needs to recognize that the value of timber in dollars has to be divided by the number of years required to grow a second crop (in Southeast Alaska 100 to 120 years plus) in order that we can compare it with that of all the other forest resources.

We are for wise management of the resources but against policies which will result in an expanded market and more wood-using industries.

Sounds like this work might yield enough information so as to make it important in a decade!

X X Land use planning high priority.

Before any further management and development occurs, the land use plans for federal and state areas should be completed and carefully reviewed and compared.

X X As land managers, we need greater assistance in evaluating resource management.

X X Our timber cutting methods are archaic and inexcusably wasteful.

X X Need wildlife assessment also.

Methods of making planning more acceptable to area residents must be developed.

Multiple-use is the most difficult, therefore deserving of the most thorough research.

X X Should include research on surplus of foresters and lack of their employment.

Value added jobs should remain at home. Rather than logs, let's export processed lumber, fiber, paper, particle boards, etc.

This should be given priority second to Resource Assessment.

Developing more efficient ways of managing forest resources is the objective of all the other activities presented in this draft. This section, being redundant, should be omitted from the draft.

RESEARCH - Basic Hydrologic-biologic Processes

Need development of the basic information on hydrologic processes and nutrient cycling on as complete a scale as possible, for as many varied ecosystems and soil types as possible and urgently needed and relatively little truly adequate planning can be developed without such information.

Nutrient losses are a major problem which need immediate attention.

So long as monoculture and game farms aren't stressed.

We recommend that a major portion of the National Forests be kept in hardwoods in the eastern United States since this would provide more water from the watersheds for mans' use and recreation.

High option: Study of the possible value of previously considered undesirable species such as alder thickets and cottonwoods, as they relate to the ecologic balance of the forests.

The key here is to work with and understand the hydrologic/biologic processes, not try to make them do what we want; "mother nature doesn't like to be fooled."

In addition to estimating the increases in productivity available through environmental modification, we should also do much more research on the effects those environmental modifications will have on the other elements of the ecosystems involved.

Hope that you go one step beyond just getting "better estimates" of increased water productivity and actually get the increased production through the scientifically-researched bases of canopy structure, species composition, ground covers, open spaces vs. shaded areas, controlling runoff, and better capture of snow-melt.

XX Too many of our programs are concocted on too narrow a research or knowledge base, and we'll pay for it. Our emphasis is on what happened, not on why or how it happened; and when things go wrong, we do not have the knowledge of why.

XX We need basic research to tell if we have a problem, and what its magnitude is, before working on ways to correct it.

Especially develop a better understanding of ecological subdivisions of the major forest and range types.

Suggest the addition of a study to identify natural pollution of the water systems and to discover what controls can be applied to eliminate the pollution.

Another valuable study on watershed, nutrient leaching, regeneration of the high use species.

- XX Need research on how landslide and stream channel stability is affected by timber removal.

Research in watershed management without high dams.

- XX This is the kind of basic research Forest Service should be doing in cooperation with educational institutions.

Water quality study efforts, however, would seem to overlap the activities of other State and federal agencies.

- XX Directly related to primary mission of FS.

A large portion of Forest Service concern should be focused in this area.

Get just one hydrologic and one nitrogen cycle into the literature in quantitative terms--all terms measured, not obtained by subtraction. Better more cycles than one so we can start to generalize. "Increases in productivity" by manipulation of ecosystems should wait until a basic understanding of the NF ecosystems is obtained.

Don't understand the terminology.

- XX Many of the items listed have been ongoing research projects for many years. Haven't we gotten enough applicable or useful results yet?

- XX Sounds like a new program. Isn't the present research program designed to provide this research data - i.e., Grasslands study north of Greeley; California?

- XX Research practitioners are a bit too remote from the real scene of action to have made much real contribution towards increasing productivity and efficiency.

- XX I suspect that we have the data. It needs to be available on the ground.

- XX It seems that from the standpoint of aiding the land manager, especially in range management, that the two items listed in the high alternative ought to be moved down into the items the Forest Service would study even if less money were provided.

Some have said water is the greatest of our natural resources. It certainly is most essential and vital in our living.

- XX This is a good idea, but it can be put off a few years.

X X Need much more information in this activity than is available.

Alteration to water quality, quantity, and the biological response, considering the accelerated rate of watershed development, must be understood with solution identified and implemented.

This is research you should have undertaken before you ever began to manage a single piece of the forests.

X X Don't believe that higher levels are justified. Forest lands management produces good water and healthy ecosystems - other land uses are so much worse as to be beyond comparison.

Incorporate under "Land and Water System" and Environmental Analysis.

RESEARCH - Fish, Wildlife, and Livestock Ecology

Man's interference-man's ability to kill and to remake the landscape for his own purpose has introduced a new disruptive influence into species evolution. The pressures and changes Man imposes are often too drastic to allow other species to adapt and this has exaggerated the rate of extinction and endangered many other species.

We believe that the study of "management systems to protect and restore habitats of threatened species of fish, wildlife, and plants" as mentioned in the high alternative should be one of the first or low altitude suggestions for research. You can't do much research and come up with management guidelines if the habitat is lost in the process.

X Page V1-34. In each of the alternatives, add "and endangered" where threatened species of fish and wildlife are referred to.

There needs to be a great deal of care to be certain that an "increased supply of livestock forage by improved management systems" is not obtained at the expense of native wildlife species. The Forest Service needs to actively discourage the introduction of exotic species.

X Should include all species (not just endangered).

Predicting the effects of environmental disturbance on wildlife populations is a very long-term kind of research. It should be done, but it isn't as important as this would indicate. In the final analysis what you really need to know is the amount of variation in diversity and numbers in an undisturbed environment compared to areas that have been managed in specific ways.

Provision for identifying and inventorying critical habitats should be made.

So long as "improved management systems" doesn't lead to too dominant a use of too many acres for grazing. Livestock production on public lands should never sacrifice native species of plants and animals. And that goes for coyotes, too.

X Need to know habitat requirements and man's impact on habitat before doing research on management systems.

We need some valid information in relation to wildlife habitat needs and adaptability to man's activities in forested areas. Too many decisions on forest management related to wildlife are based on emotion and not on scientific facts. In the big game area studies will have to relate to seasonal range and habitats in competition with domestic livestock needs.

Research should be directed at finding the long-range impact of livestock grazing on all native wildlife species.

Livestock accommodation should be secondary to the protection and preservation of the native wildlife populations and the natural habitat which supports them.

An extremely important activity if our country is to retain some part of its original biotic qualities. Livestock grazing and browsing has caused a great deal of damage in the National Forest System. Another exotic activity that has caused a great deal of damage is the planting of "sport" fish (non-native introductions) in the waters of the National Forests. This practice has been extremely devastating to the native aquatic life.

Page VII-23, indicates that intensive management for livestock forage production also benefits wildlife. Pure stands of grass have little wildlife value.

Fish and wildlife values have not received the attention they deserve, and the Forest Service must simply devote more time and funding to this aspect of our resource system.

X X Research to the point of being able to eliminate conflict and allow the environment to progress in a static to upward trend.

X X Emphasis should be on wildlife and fish, not livestock. Livestock have been overemphasized in past range research.

Am not in agreement with increasing livestock production on rangeland unless this data is provided to private ranchers and not applied to National Forest System resources.

Such research proposals seem to reflect some decision--the details of which I am not aware of--that livestock grazing is more of a multiple use than wildlife habitat.

First item under high alternative on page 32 of CI No. 13 seems out of context. It implies that U.S. Forest Service interest here is to expand livestock grazing on lands under their control.

X X This research should not be aimed at increasing livestock forage on the NFs. Instead the thrust should be to determine what the effects of livestock grazing are on all wildlife (big game, small game, songbirds, birds of prey, and upland game birds). Better identify habitat requirements of all forest wildlife, particularly songbirds, birds of prey, and furbearers.

X X Need to have better information for quantifying benefits of fish and wildlife resources.

High comments: (1) Livestock should be considered separately from wildlife and given low priority. (2) Conflict between livestock and wildlife should be studied. Where conflict exists, wildlife should be favored. Livestock can be accommodated outside the National Forests; whereas, wildlife range is limited largely to the Forests.

High option on all except increase of livestock and management for livestock. We know how some forests and trees have been destroyed all for the sake of grass.

In fact, what you really want to know is how environmental manipulation affects animal populations. This you have included only in the High alternative, and for threatened species only. I believe development of management systems for threatened species should be included in the low alternative, and for many more species at the Moderate and High levels.

A plan for inventory of aquatic and terrestrial habitats for species composition and abundance should be included.

Provision should be made for preparing and implementing wildlife management plans.

"Threatened species" should not be limited to selected species but should include local populations of a general species which, overall, may not be threatened (in the common usage of the word). Example: An elk or sheep herd in danger of obliteration because of intrusion into or loss of traditional habitat.

XX An important area needing a great deal of research--small animals and birds, for example:

- (a) What are their habit needs?
- (b) How will different types of management affect each?
- (c) What actions can be taken to compensate for habitat changes as a result of management?

We again maintain far too much time and money is proposed for studies, predicting, identifying, etc.

XX The education (public), availability, and utilization of present knowledge would go a long way in improving this resource. The political arena needs to be strongly considered.

XX In range we have much of the knowledge needed. What we need now is dollars to implement and followup on programs.

Enough species have reached extinction that protection of threatened species should be instituted in significant form.

XX It appears that we may be duplicating research already being conducted by State Game Departments. However, the one big area of research it seems we should be into here concerns the threatened species of wildlife protected by Federal law. The states probably get little money in areas not related to game animals.

XX I would prefer habitat improvement be funded by a State license tax, etc., that those who benefit pay for game animal improvement.

XX Overlaps on state fish and wildlife activities. Seems like the time is long past for developing some specific land management guidelines with other agencies.

Please actively support and encourage full cooperation between all Federal, State, and local agencies involved with these problems - particularly concerning input and dissemination of research information, studies being conducted, etc.

XX While increased supply of livestock forage is also very important, research of this nature should be done by the various Agricultural Experiment Stations usually associated with colleges and universities.

Carter County private and public lands provide an abundance of wildlife habitat for indigenous species. In many cases, conservation and development of these lands along with predator control have provided conditions that allow deer and antelope numbers to increase dramatically creating an over supply. To harvest the deer, hunters use roads that provide access. We feel that hunters should share in the maintenance of these roads -- perhaps through U.S. Forest Service coop agreements with state fish and game departments.

Biotic control of noxious weeds should also be included (example - Hawk Moth on Luffy Spurge).

If you manage things more gently in the future you will not have to carry this program out all the way. Since some of the problems should be to avoid massive disruptions of ecosystems, that will solve a lot of your problems.

National Forest Systems lands provide a habitat for predators and rodents which at the peak of their population cycles must spill over onto bordering private lands. Because stockmen, farmers and sportsmen suffer economic losses from these animals we feel the Forest Service should allow some effective chemical toxicant control on Forest Service lands.

XX Gad, do you mean that no livestock ecology work will be done at any but the accelerated level? The presentation of these alternatives is not consistent with the definition of low, moderate, and high. Please redo this category.

Permits should be issued for the shortest practical number of years and should be subject to regular review rather than to be allowed to become self-perpetuating.

While waiting for the results of research on the effect of timber management on wildlife, certain activities such as large scale clear-cutting known to be destructive of winter wildlife habitat in Alaska, should be halted.

Identify areas for possible Research Natural Area designation.

The aspect relative to threatened and endangered species must be implemented now!! (i.e., stop the Gasquet-Orleans Road in Six Rivers National Forest, California)

Provision should be made to monitor outputs of management practices in order to make adjustments in ongoing programs where needed.

X X A must particularly for fish in view of need for lower priced fish and man's impact on fish such as dams and pollution and increased fishing pressure.

X X Program should include research on the vegetation effects and nutritional effects of grazing on plant communities and arrival biological needs are provided for at different levels. Biotic control of noxious weeds should also be included. FRES discusses relationship of total grazing on NF lands to the national livestock picture but does not discuss the economic dependency of the livestock industry in states which have more than 50 percent of the grazing land in the state in federal ownership. Some research should be done on this and interpreted on a state by state basis.

X X Research could develop the suitability criteria for grazing of domestic livestock on the various land types. Due to additional uses on lands previously used primarily by domestic livestock, there is a need for the redevelopment of suitability criteria. We have gained more knowledge of land capability in recent years in respect to livestock grazing, watershed, etc., and much of our suitability criteria is 20 - 30 years old.

Include adequacy of Forest Service manpower to do the job.

The concept of what constitutes wildlife and threatened endangered species should be clearly defined.

X X A moderate approach here with maybe better identified and selected goals could accomplish the needed job.

X X While most of us are in agreement that we should do what is necessary to protect endangered species, there is a danger of over-reaction or applying restrictive and costly controls with insufficient evidence of the need for it. A more moderate approach would likely generate more support and assure continuation over a longer period of time.

X X We need to develop a sound base, and put the emphasis on providing fundamental knowledge.

This is great, but there is little evidence that the Forest Service is planning to do much for wildlife until after they get all of the old growth off the land first.

X X This kind of research will help the Forest Service do its job better.

There is soon to come a real "stampede" to produce a greater share of the earth's food/fiber resource. This sounds fine in international parlance but is counter-product if resource base is degraded.

Incorporate into "Wildlife and Fish Habitat System" and "Range Resource System" respectively.

I caution against over-manipulation of any resource especially since some past research programs and ideas have been proven wrong.

At a small fire station about 5 miles east of Heuret, California, where I stopped about 10 a.m. on a work day everybody was just sitting or laying around. The place was dirty and unswept. At the Mt. Laguna Fire Station (Cleveland National Forest) nobody was doing anything on several visits. The dwarf mistletoe is running wild among the pines in this entire area. Nobody is doing anything.

Research seems to have reached a stagnation point in development of intensive timber culture and in range management techniques. Innovative ideas are needed in these areas. Most of our present research seems to be keyed to a reappraisal of existing systems with slight modifications. These innovative ideas are not necessarily the responsibility of research. Many if not most should originate from the field where they have a more intimate knowledge of the needs.

RESEARCH - Timber-related Crops

Should think there would be some ways to increase rural employment income by suggesting establishment of business opportunities related to forest products, beyond just increasing the production of timber-related crops. The recycling of wood fibers, for instance, referred to toward the end of your report, and business opportunities that could be established based on that activity.

- X This program is aimed at a low socio-economic group in society, usually left untouched by positive programs.

Why not help keep citizens off welfare and food stamps, if possible. By creating opportunities to become self-reliant and not government-supported.

- X X With high unemployment, why not investigate all possible avenues which may give others a chance to work.

- X X These timber-related crops are the lifeblood of the local people in and around a forest. If we can provide for them, we decrease unemployment and stabilize local communities, which is one of our basic aims.

Do not permit uneconomic operations just as an excuse to provide local employment.

Let U.S. Navy Research develop new materials and compounds for "Naval Stores" if necessary. As to Maple Sap, why should tax dollars derived from non-maple sap producing areas (which are largely confined to New England), be used for the advantage of a local few? Let's not get too socialistic as regards people living in forested areas.

Don't know what "maintenance of current quality of costs of naval stores and maple sap" means.

- X X Why limit yourselves to naval stores and maple sap?

- X X Don't believe the most effective use of forest land, based on actual needs (not demands) of people, is production of Christmas trees. Priority should be based on what people need.

Christmas tree harvest should be eliminated except for thinning purposes.

Suggest closing all National Forests to commercial or private Christmas tree cutting--too many are left to waste on the big city lots and not sold.

Christmas tree production should ideally involve a way individuals can cut their own trees; and production of maple sugar and naval stores should also hopefully be open to more participation by individuals.

X X In some areas, timber growing alone is not a viable investment opportunity, but in combination with some other timber-related crop, it may be viable.

Other uses which would provide employment opportunities while observing environmental balance should be strongly pushed, particularly as to non-timber development.

An important aspect of high alternative is in the evaluation of joint production of timber-related products and other forest resources. We must make the most of our forest lands and not just limit them to lumber production.

X X Include wood for a source of energy and fuel. Believe tree limbs, slash, and bark could be processed to be competitive with oil and gas as fuel and energy. Sawmill near Woodruff, Wisconsin, is putting bark through a hammer mill to pulverize it. Then blowing it into a burner where it is burned with suspension. Burns more completely and more heat furnished, less ash, and hardly any air pollution.

Why no mention of advance thinking about possible exploitation and overuse, and how to avoid such before they become problems.

Maybe you can even reintroduce a majority of people to the superiority of baking potatoes in rosin.

X X This item should be expanded to production of timber-related goods in small enterprises.

Avoid introduction of southern pine where hardwoods are currently present.

Suggest a program to move permanent residents out of forested areas. Whenever water is polluted by human waste, the users below must clean it up or suffer the consequences.

X X I approve of this type of research, but am wary of efforts simply to wring more economic gain out of the forest.

No more people that are going to rape the forests, especially for the naval stores. More live Christmas trees in pots to cut down millions of trees is a waste of energy, etc. More production of medicinal plants.

Any activity with a basic commercial intent must not interfere with the Forest Service's more paramount commitments to wildlife, trees, water, et al.

X X Being against this alternative would be like being against motherhood. I just wonder what we would have to sacrifice to get it.

This Research Activity appears to have potential of becoming another boondoggle; we do not support it.

- X The increases in timber-related crops will depend on the economics of supplying the public with them. Can these products be supplied at competitive prices?
- X Too much money can be wasted on these kinds of services. Let's have more logic and less politics in decisions affecting research programs.
- X Key to resource systems.
- X This research should come under intensive timber culture.
- X Should get all we can out of the forests to make them fully productive.
- X Need to make full use of all resources.

Since the climate is much like New England, I believe it would develop a new Alaskan industry.

Probably our most undeveloped resources in the United States today are the timber-related crops. There is not only a need for achieving a use for these related crops, but first, to even identify them. The research should be, at first, on a priority basis of contribution to our economic and social needs. The general level should be not less than moderate, but as information is developed, at least some activities will be moved into the "high" category. Again, specific local contributions should depend on local needs and periodic reviews and adjustments.

- X X There is not much difference between the low and high alternatives.

Not understood! This one seems confusing and redundant to me!

Timber is only one use, and we feel it should be subordinate to all other uses.

- X X We should try for the highest supply alternative in most cases, but recognize that we won't be able to get everything, so set priority.

Do not go overboard on this program--moderation in all things is a virtue.

GENERAL COMMENTS

It seems to me that as a direct result of the past two decades, over-emphasis is being placed in the draft on some of the less tangible benefits of the country's vast forest resources--environment, wilderness, esthetics, recreation, etc. This is understandable in the light of our most recent era of affluence. However, as you well know, the picture is changing very rapidly, both nationwide and worldwide. Therefore, if we are going to be realistic about the future we need to assume a much broader perspective in our "Look Ahead."

Unlike this report, we are not sanguine about the next ten years. We would like to see the United States Forest Service get ready for some really tough and urgent demands in the future. Demands based not on a desire for more luxury items but on a necessity for a healthy and productive watershed, for instance.

Draft EPFF contained several assumptions based on a continuation of the kind of industrial development we saw from 1945-1973. These assumptions are questionable.

My opinion is that the intense demand for resources and services is yet to come--at about 1995. Therefore, rehabilitation, protection, capital development, not consumer use, and research should be heavily emphasized and funded.

The economic assumption on the bottom of page VI-2, EPFF, now appears less likely, as does the assumption on the bottom of page III-11 that future generations will have much higher per capita incomes and standards of living.

In the Forest Service view of the future, no one need be denied a hunting license, a grazing permit, a logging contract, or the exclusive use of a wilderness area. The keynote is abundance for all.

I disagree with the trends projected on pages IV-2, VI-2, VII-3, and perhaps elsewhere in the report. We are not, nor should we be, headed for an "increasingly mobile and affluent population." The American people are already in the process of changing to a more conservative lifestyle that reflects greater awareness of their land's limitations to sustain resource output. New lifestyles will consume less, not more, goods and their new conservatism is already an obvious part of the American scene. The trouble is, neither the industries, political leadership, or the Forest Service has stepped forth to show the people the blazes on the trail leading to living within our land's capability. In a true "Environmental Program for the Future" lies remarkable opportunity to lead the way.

With respect to the National Forests themselves, nowhere in the report do we sense any real concern or interest in the non-Federal inholdings and private adjacent lands, and the alarming developments that are taking place.

As a Nation we cannot support our present demand levels for forest products, fuels, water, recreation, etc., without disastrous consequences. Accordingly, the forest management plant should be based on level or declining demand trends, even if our standard of living must suffer.

Planning is necessary, but need it become a frenetic obsession?

Based on the foreseeable economic situation in the country, there is little reason to believe adequate funding for even the low alternative will be realized.

It is an unstated assumption of the report that it is necessary that supply and demand of most resources continue to increase. At a time when it is becoming increasingly apparent that our resources are limited, it is a major failure not to consider conservation through decrease in supply of some of our precious resources.

Population projection is higher than the Population Reference Bureau predicts and the projected increase in disposable personal income is also high.

An obvious source of inexpensive resource inventory data is the ERTS program. Satellite information from the ERTS program can provide accurate, fast response time information on land and water, timber, range, and wildlife and fish habitat resource systems.

On the last page of the introduction, it has two points which it includes under the Chapter 8 Summary and Discussion. I would wholeheartedly state that the ordering of these two points reflects the bias which has gone into the preparation of this report. It certainly seems that Point 2 is far more important to the Forest Service, to the industry, to the American public than Point 1, and these should be reordered in priority.

It appears that the program outlined is too strongly oriented towards environmental considerations. These were priority issues a year or 18 months ago, but are more balanced by other needs today and will become increasingly so in the next two years.

Is the general economic assumption of continued economic growth at the rate experienced during the 1965-1974 decade realistic? In light of the present economy, what would be the effect of falling short of this prediction? What would be the effect upon resource demands of exceeding this level?

What is the projected influence of the energy crisis upon recreation and wilderness use, land and water system, and the timber resource industry?

The basis for the rate of population growth presented on Page IV-2 is not discussed. What will be the impact upon the Forest Service's programs by exceeding or falling short of these projections.

XX The United States needs the basic raw materials, especially the renewable resource types.

X X It is inevitable that the National Forests are going to be called on to provide more of the basics for life in the future, including food, shelter, and relaxation. Eventually it will get down to food and shelter.

X X For timber alternate, it will not be possible to increase productivity enough through better management and knowledge to gain some output in next decade--it will stay constant or lose. No major gain in output will be made in next five years or even 10 years, except in utilization under any level of management.

X X Coal, oil, and gas activity will certainly continue to increase. To protect and coordinate other resources. The Forest Service must attack this resource area using a high alternative. Coal, oil, and gas production definitely need much more emphasis if we are to keep even with things.

X X Demand for goods and services is displayed exponentially which we feel is unrealistic over an extended period of time.

X X It seems the population increase has been sharply reduced and may decrease much more. You have taken for granted it will gradually increase and along with it a proportional or even increasing rise in the use of our resources. I believe there is a good chance you may be wrong.

X X In the future, demand for resources will outstrip supply. Research should be to find ways to stretch our supplies to keep pace with demand or close to it.

X X A major assumption of the draft seems to be that demand for all forest resources will increase greatly and the National Forest System must act to meet these anticipated demands. While not denying the need for planning actions necessary to meet future demand, I feel the National Forest System should also recognize the necessity to reduce that demand. At least alternatives could be presented. People should be shown what each of their consumption habits costs in the form of soil, water, timber, wildlife, and potential recreation land.

Except for a few specific special interest groups, such as some western ranchers, the people of this country are demanding their lands be administered in such a way that they may enjoy their forests and plains with as little man-caused disturbance in evidence as possible.

X X IV-2, Table IV-1. In projecting indices of GNP, disposable personal and per capita income, you should state whether these are based on estimated constant dollars or on gross dollars. Also, you should state what inflation rate is assumed will be experienced during these periods both in average cost of living and for costs of wood products.

Instead the plan and its data follow along on the assumption that growth should continue in the future as it has in the past. Growth trends, however, may be checked by diminishing supplies of raw materials and realization of detrimental aspects. The lack of innovative detailed intentions and precise programs is appalling.

The program is not a plan for national resource allocation. It does not deal with what combination of resource use could meet a given demand. It does not set regional goals of any kind. Instead, national needs are supposedly described. These needs and the needs of the Forest Service itself are capital oriented instead of land oriented.

There has been no place in management for the land ethic which would base management solely on the capability of the land. It has, instead, subscribed to the policy of maximum production for economic benefit. The land consequently has been misused and the "plan" gives the go-ahead for more of the same.

Projections of growth and demand have got to be rethought. It is unrealistic and absurd to keep planning for the future based on statistics from a past which was gluttonous and wasteful, considering the finiteness of this planet.

The data reads like a computer printout. Not enough is presented so that the public can follow and evaluate clearly the Forest Service thinking. The data that is presented is questionable. For example, population projection is higher than the Population Reference Bureau predicts and the projected increase in disposable personal income is also high.

Inflation and increased taxes advises one to be cautious in marking the high alternatives.

The Forest Service has based the Plan too heavily on the philosophy of continued exponential growth in supply and demand.

The report contains a long list of special interest demands without acknowledging that resources are finite and that these demands conflict. There is no mention of the need for conservation or restraint. "Demands" should not be confused with "needs" and all demands need not automatically be satisfied.

Instead of trying to determine at what levels the National Forests can supply goods, we would urge that the Forest Service consider what the National Forests are and what future, in terms of the next century and not the next decade, they are to have under present policies. Ten years is too short a time to determine if one has irrevocably altered an ecosystem; centuries are too short to correct the error.

Speculation is of course involved in predicting future attitudes, values, demands, and needs. However, the EPFF contains only one-sided speculation which emphasizes a continuation of the same wasteful growth and development this Nation has witnessed in recent decades. In the prediction of future trends, it is vital that the Forest Service again seek outside, expert input in developing the full range of future possibilities.

Unfortunately, we find in southeast Alaska that Environmental Impact Statements appear to have been prepared more to justify decisions already made than to evaluate the results of a proposed action. Guidelines are not being followed.

The EPFF acknowledges: "Essential to the formulation of any long range program such as is discussed here are realistic predictions of the demand for the goods and services to be produced." (p. IV-1). Unfortunately, the EPFF's predictions are not realistic. It would appear that the Forest Service has not fully digested the impact of the emerging phenomena of very low birth rates, chronic unemployment, and high energy prices, etc. Gross National Product predictions appear to ignore inflation (pp. IV-2). The assumption that "total economic growth is likely to be 40-50 percent every 10 years" (p. IV-2) is an absurdity in the context of today's economy.

"Rising incomes will permit shifts in American diets toward goods of higher cost." I do not think luxury eating should be a factor in allocating forest resources. That includes food for pets (except seeing-eye dogs).

Believe that the "low cost" housing argument is overdone almost to the point of willful cynicism.

Neither is it clear that you would not consider any other assumptions as to rates of inflation, economic activity, or funding levels of other agencies.

Demand as a function of price.

In general, we are not so optimistic as your statement suggests. We see reflected throughout a growth philosophy which, while once suitable, is now open to serious dispute.

Failure to make a positive statement about population control and the inability to supply forest resources to an increasing population is poor judgement.

I worry that will all the increased pressures to attend to human values that you endure, that your basic obligation to the resource is given less than the attention it should receive. Based on this document alone, how can anyone provide you with an informed choice on alternatives? How is one to know that, for instance, the high supply alternative for timber resource system is feasible without adverse effects on other resources? In many ways, this form of public involvement is superficial and dangerous.

X X In all of our forest planning a basic problem is the degree to which we will harvest timber for export with Japanese market demands in mind. We face the same "wheat crisis" again.

X X We are now being asked to serve a wider range of human values and to accept an obligation to members of the public with whom we have no commercial transactions.

X X Success in the program has at best been mediocre. The problems of public relation to the Forest Service in part reflect that. Lack of trust, open hostility, lawsuits, and similar reactionary qualities have penetrated our longstanding stature of confidence, pride, and professional competence. Public discord with the Forest Service is caused in large part by misunderstanding of the motives of the agency, and well the public should be concerned unless we can make visible the evidence of the useful role that we are endeavoring to perform.

X X As more information becomes available in the way of data management intensity increases and conflict of uses increases, we must have such a storage and immediate retrieval system in order to even raise to the adequacy level.

X % Obviously, a great deal of priorities must be placed among the various categories as well as within each. I feel that this program has accepted the fact that our use of resources will continue to rise without any end in sight. This seems to be our way of life. Someday we will have to taper off in our reckless use of the natural resources.

The Forest Service should be suspicious of propaganda, such as "there is a tremendous need for more wood for house construction in the U.S.A." when the Service should know that lumber companies and the Service are selling timber to go to Japan!

Other countries must be included in conservation practices. It is a worldwide problem, and while we can lead the way, timber still comes through the loudest in the EPFF. The Forest Service appears to be getting further and further away from true multiple use by subjugating all other considerations and resources to this one dominant resource.

Re International Forestry, page II-11. To what extent and re what aspects of forestry is our Forest Service involved with in cooperating with other countries in exchange of information?

One of the suggested approaches is to "increase net imports of timber products." With our current imbalance of imports to exports running in the billions of dollars, this approach is not in our economic interest nor does it produce jobs. Suggest deleting it.

The EPFF makes little or no mention of international forestry. I think that much can be gained through technical exchange programs with other Nations or international organizations. Also, imports and exports of timber and timber products greatly influence national timber supplies and related price factors. Finally, Tropical Research is greatly needed for potential utilization of tropical or subtropical hardwood tree species.

The foreign trade issue has profound impact on wildlife, recreational opportunity, and esthetics. This should be made very clear, at least mentioned as you have in other sections (e.g., supply). Trade rules influences timber "quotas," the bane of wildlife management and forestry coordination, nationwide.

X X Keep the USFS out of the 10 Standard Regions which are part of an international conspiracy of one world socialist government (well document; if you don't believe, start reading). Avoid metric adoption; it is part of the above conspiracy too.

X X Avoid international programs like giving our enemies (any Nation having a completely opposite political and economic system and which still have as a goal to dominate the world with their system) our knowledge like Russia. They are still out to bury us.

Questions raised in the EPFF, such as user fees, were not asked to be commented on in this response form. Space could be allocated and such questions asked for comment. As an ex Forest Service employee, I am proud of the job you have done here. Keep up the good work.

The draft EPFF alternatives should not be limited to existing Forest Service programs. In many cases, new methods of attack are needed.

There is a lack of analysis of who benefits and who pays for each of the three alternatives in each system. Most of these systems do not operate independently of one another.

The "Program Input Index," figure VI-3, page VI-7, would be more meaningful if the components of the index were known. The index may conceivably include funds and manpower from Forest Service regular programs, from State and local programs, and even from forestry incentives funds.

The relative importance and potential of program efforts on both Federal and private lands needs to be more clearly shown. Pie graphs in the introduction could be effectively used to accomplish this. Commercial forest land acreages and current timber harvests by ownership classes need to be shown elsewhere.

Develop criterion or a test by which one chooses one alternative rather than the other. In principle, the optimal criterion is the one which yields the greatest excess of positive values (objectives) over negative values (resources used up, or costs).

A discussion of the long range effects of the various activity inputs should be included.

One almost gets the feeling that the decisions have been made and only the level of involvement (or amount of emphasis) remains to be specified. Is this what one might call a "self-serving document"?

The format of the draft and the Response Form does not appear well designed to promote public involvement or elicit public comment on possible desired changes in emphasis or direction, but only changes in level of effort.

Despite the title and bulbous text, it is almost impossible to obtain a clear picture of the Forest Service's plans. While there are some good intentions listed, there are no specific listings of projects to be undertaken, priorities, or funding. There are no objectives, perhaps because the many diverse ways of managing the National Forests defy packaging into high or low categories. The options are much more complex.

Sorry to be somewhat critical of the EPFF. It hasn't really been a well-directed program from the start. It hasn't been coordinated with, or related to, the National Forest planning process or to basic National Forest data in a realistic way.

Low options indicate we are going to have a continued output at this level. I do not believe this is so. We will have to be very efficient to even maintain those projects that have been done in the past. New outputs will not, or cannot, be realistically expected. Quality maintenance of existing and/or previous projects will not, or cannot, be fully expected. The wording should show this.

Moderate option indicates we are going to have even higher outputs than at the low level. I do not believe this is so. This is the level we need to be at in order to do a full quality job of maintaining existing and previous projects. The wording should be changed to show this.

At high option we may expect to maintain previous work fully to a high quality and increase outputs to those levels shown in the low supply alternative. I assume the outputs shown are based on National Forest System land capability nationwide. These comments also apply to the activities shown as common to all alternatives.

On page VII-36 and VII-39, there are two tables. There appears to be a difference between "Timber and Other Forest Products" in Table VII-4 and Table VII-5. The difference, I assume, is other forest products. Would it be possible to explain what other forest products are?

It is interesting that another section shows roads being built while others are destroyed.

Throughout the plan, different periods of time are used. This is confusing in that unless the plan is well understood, trying to compare statistics is almost impossible.

An idea on resource that might help in preparing any plan, large or small, is that Forest Service retirees are a group that may be able to make an input that would be less biased than in-Service personnel, pressure growth, or the general public.

The way the material is presented, it defies analysis.

What is "fuel reduction," and how is it carried out?

Furthermore, there were several systems where I would have chosen an even lower category if one were provided.

Entire evaluation is so designed that it is nearly impossible for me to know what you are really speaking about. Chapter VII then is your own evaluation (is that the whole purpose of this - to give the public a chance to comment) organized so that I cannot relate it to the lists in VI that I can comment on!

The options are much more complex than just choosing one of three alternatives. This booklet should ask the reader to choose output levels for individual management techniques, not for whole resource categories.

Understand your theory of "Key Indicators" within systems. Even so, your lack of acknowledging a need for intensifying private landowner and general public awareness is overwhelming.

The "Environmental Program for the Future" represents a realistic and meaningful approach to the problems one associates with multiple watershed use and Industry Development, in that activities have not only been identified, but also quantified, in a concrete way for action formulation.

Re: Table VII-4: The grand total cash receipts and deposits for the low, moderate, and high supply alternatives range from 2,641, to 2,666 to 2,727 millions of dollars. These do not provide enough variation to be considered as discrete alternatives.

Re: Environmental quality, and effects on vegetation by timbering activities: The statement is made on P. VII-5 that, "Timber treatment accounts for most of the vegetative change on National Forests" should be modified to account for the changes in species composition which have been brought on by a 70-year old policy of fire exclusion.

On page VII-7, the statement is made that, as a result of efficient fire control programs, disclimax communities (of plants) are being replaced by more "highly developed communities" that are more in tune with the prevailing climate. What standard is being employed in the conclusion that the climatic, or Clementsian climax, is the more highly developed.

Suspect that the choices to be made are not simply - low, moderate, or high supply levels over the entire spectrum of goods and services produced by the National Forest System, yet this draft program leads one to this type of thinking. There have to be trade-offs; a high alternative supply level for timber must involve concurrently a low to moderate supply level in some other category.

Believe that this report would have been better organized and more effective had it been oriented around the basis of the United States Forest Service Land Planning System, which I am sure exists in one form or another. Land Use Planning is simply mentioned salt and pepper fashion. It should be a very fundamental portion of this report.

Last paragraph is a little off--PVI-12 says that difference between rules under low program and moderate program for 1984 is approximately 2 billion B.F. - that would increase employment 150,000, not 1 million as stated.

I fear that the Forest Service has reached a point where it spends too much effort on planning at all levels of administration and, as a result, accomplishes little or nothing before replanning seems indicated.

I do not see why we need a Bureau of Land Management separate from already existing agencies.

The net result is that the EPFF was written in a manner that emphasizes the supplemental and additional responsibilities of the Forest Service at considerable expense to its primary responsibilities, and resulted in planning for a time when resources found in the National Forests will be more critically needed than ever before.

In summary, if I were to select an alternative management plan, it would be a combination of a land, wilderness, and wildlife system. The land system would preserve the base on which the other resources grow; the wilderness system would preserve the scenic and wilderness values of the forests; and the wildlife system would preserve the wildlife resources.

Judging from the document, I submit that the people of this country are out in front of the forestry professionals in matters of land stewardship and resource conservation. There is, however, time to change and I want my comments to help you prepare a final program that includes strong land management leadership.

The six major systems proposed in the report project Forest Service inability to depart from an outmoded and currently ineffective functional program that defies integrated land management. Indeed, land management is relegated in the report to boundary adjustment, acquisition and similar custodial activities. How much better it would be to describe the kinds of lands we have on the National Forests, explain how you plan to manage them then show the multiple resource output potential from several levels of investments in each of these kinds of lands. That way you would be telling the people something they could relate to. However, to depart from the functional approach projected in the report and organize with land as the basis would, of course, diminish the thrust towards polarization between special interest groups. No longer could the Forest Service passively seek middle ground while the special interest groups thrash out the land's destiny in the political arena. In contrast, the Forest Service would stand tall at all organizational levels for land stewardship accountability. Surely, that's what you want the program for the future to do.

On the basis of the EPFF, I can foresee that the USFS can spin off to any one or several of the most unfortunate directions within the promised 10 years. Were I or others to object, the USFS could retort: "It is right here in the EPFF plan to which you had had a chance to object."

The EPFF is program oriented not resource oriented. A resource based long-term plan would start with land capability - what uses various types of National Forest land in different areas are capable of supporting. Starting from a detailed resource base of this type, the Forest Service could present to the public the trade-offs implicit in any level of development. It could discuss what conflicts could be resolved with increased funding, which ones could not. Information should be provided on what values would be lost, maintained, or gained at various levels of investments. Only if this information is presented, can the public meaningfully participate in deciding which mix of output is most valuable. A rational choice can be made between conflicting resource uses and the investment priorities could be established. The EPFF provides none of this crucial information necessary for public involvement, instead it seems to be more of a fund appeal than a long-term management plan.

Page 2 of "Highlights of the EPFF" contains the passage,... "these forest lands, which after all did belong to the public..." (emphasis added). You have incorrectly used the past tense; National Forest land still does belong to the public.

The illusion of precision can be dangerous. Better to keep the options open, particularly on the low productive lands, as it is a snare and a delusion to spell out in words or to delineate graphically an exactitude of details based on empirical knowledge.

Bureau of Land Management Lands, Pg III-7. Even though it is stated there was no requirement in the Wilderness Act to review the vast acreage in this category, I should think it would have (or should have) been reviewed for the purposes of possible future exchange into the Forest Service System for timber production and multiple-use purposes.

Too many Forest Service administratives and researchers have an over-developed propensity for making the simple complex.

Rapid expansion in all directions at once may result in a poor program and wasted money.

I would suggest a supplementary quick response form of appropriately worded fill-in-the-blank questions for people not having the time for a detailed written response.

Although environmental factors are considered extensively here, most of this report is very anthropocentric. For the long-term benefit of humanity, it is essential that we consider the consequences of all of our actions in all of their complexity.

Page IV-9, off-road recreation vehicles - text suggests a doubling of off-road recreation vehicle use by 2000. This is difficult to justify based on data in Table IV-2 which indicates a 41 percent increase by the year 2000 based on 1975 figures.

In a period with multi-disciplinary approaches, do we have the right mix of professions; i.e., in state and private, is there a need for more wildlife, landscape, and other professionals? The same can be said for National Forests and Research, but to a lesser extent.

This is the most frustrating public document I have ever seen the Forest Service produce. Frustrating because it calls for more intensive management, when the forests need less. Frustrating because it calls for higher expenditures to produce more, when the forests are already being strained and future productivity decreased. Frustrating because it assumes continued expenditures of fossil fuel at an expanding rate when less and less will be available.

The EPFF has a strong orientation to the needs of various industries. I will be watching to see if you deal with the wants of individual citizens as well.

The EPFF is unclear in many areas. So much so that I found it impossible to choose between alternatives. I found that I did not have a sound, realistic basis for choosing alternative levels for the resource and research sub-systems.

An objective (or objectives) should be given for each resource and research sub-system. Under each objective quantifiable goals or targets should be given.

Missing is any plan, expressed or implied, for making compatible diverse and competing demands or for meeting increasing demands which must and do compete with each other in a finite system. The plan appears to attempt to offer all things to all men, merely by pouring enough money into developing each and every resource. Many of these developments are incompatible with each other, and some can be developed only by foregoing development of others.

A listing should be made of the numerous fine reports of the past that recommended intensified forest management of the National Forests which were never accomplished due to unresponsive Congresses through the years. Such reports as the Capper in 1920, the Copeland in 1933, Timber Resources Review 1958, Timber Management Policies 90th Congress 1958, President's Advisory Panel 1973, Timber the Renewable Material 1973, and the Public Land Law Review Commission Report 1970.

I purposefully did not read the complete EPFF draft document for fear it would embroil me too deeply in detail, thereby defeating my objective.

We see the need for this additional information: 1) Statement of goals for managing the National Forests; 2) Objectives for the several resource systems with indications of relative importance and means of achieving trade-offs; 3) Costs and benefits of the several levels of management for each resource system; 4) Some idea of regional inputs and regional impacts; 5) A tie between the projected level of activity in each resource system and the corresponding activities in research.

Tables IV-1, 2, 3 - would be much more illustrative of rate of change in the trends if even 5-year time increments were applied for reference.

However, a more detailed elaboration of program costs and the relative trade-offs between costs and benefits of alternative programs would seem to be helpful in formulating national priorities for National Forests consistent with the overall goals and objectives of our society. In addition, a longer range viewpoint of National Forest programs is needed for the development of effective national priorities.

The Forest Service has, and I hope continues, to resist unreasonable demands placed upon it by timber companies and overzealous environmental pressure groups.

The number of acres removed from production by State and Federal Highway Systems, the demand for land as our population grows, average age of the population year by year, and the effects upon recreation and most important, the overall state of our economy and that of the world.

We found that we could comfortably support the EPFF because it had something for all of us, except possibly the most greed preservationists. Forest industry representatives have regularly asked the Congress to provide more funds for forest recreation, better water yields, range improvement, and wildlife habitat improvement. We have done this because we recognize that the American public has been deprived of benefits that reasonably should be theirs from the National Forests.

The displays of the descriptive material for each of the three levels of financing in Chapter VI is generally identical or quite similar. The repetition of this descriptive material three times makes it difficult to establish this fact and impedes comparison of quantities of inputs and outputs.

A major shortcoming of the EPFF document, in our opinion, is that it takes the current Forest Service policies as given and doesn't really offer the reader a meaningful range of activity levels.

Increase the difference between the activity levels being considered and indicate the flexibility for sub-activity adjustments within each level.

Apparently there is a universal tendency to extend planning into peripheral areas that are not of immediate concern, but may possibly be of concern at some future date. This often leads to overambitious plans that may not be either necessary or desirable.

The document does not contain any backup or justification for the various activity levels. The implication is made that any level can be undertaken provided there is adequate funding, without ever mentioning what the funding levels are required. Without cost and benefit information we are at a loss to recommend anything based on material contained in the EPFF document.

The brief discussion of demand projections for the various goods and services which must be supplied by the Nation's forest lands, should be broadened to include information on specifically how the National Forests can be used to fill these social and economic needs.

The aims of all the programs presented are admirable, but for the most part it is impossible to comment because of the lack of data on present conditions and the lack of cost information.

Numerous generalized statements are made concerning the environmental impacts of all levels of all activities in the forests. These statements need to be supported with data and further analyzed. The presentation does not substantiate its claims.

We think your economists should work with your environmentalists. Both would be likely to be more useful as a result. Practices whose short-term economics appear favorable may have ecological impacts that in the long term are adverse to the environment and to long-term economics as well.

We think you should revise page VII-30 completely. It is dangerously misleading. Some could interpret your thesis as a case for dividing up the National Forests between the timber industry and the National Park Service. This we do not favor.

There has been no attempt to tie together the environmental impacts, trade-offs, etc., with the alternatives other than to say that at the different "levels" there would be greater or lesser amounts of rehab work done.

The whole premise of this plan is based on the "Virgin Land Theory," the native 19th Century notion that the earth was made for man to exploit as he pleased. Your scientists should know better.

Your list of literature cited is a dead giveaway. You've used mostly your own material which is a suspect and unscholarly procedure.

Some of your good ideas and plans are entirely wiped out by the bad ones. How can you still be using herbicides and expecting clean streams and pure ecosystems?

Snowmobiles are not amenities! They do not enhance a forest.

We commend the Forest Service for developing this draft plan and equally for devising a way for concerned organizations like ourselves to react to it in draft. Our extensive involvement in urban, suburban, and rural analytical and remedial projects has brought us into direct contact with most of the concerns you have raised.

Generally, have bad feelings about this report and feel it has been skewed toward intensive timber management. The suggested rotations are about 120 years too short. Though the word "system" is thrown

around a lot, what is presented is a far cry from an ecological systems approach.

The EPFF should describe present Forest Service programs to provide technical assistance and support for forest activities on private lands and how the Forest Service is organized to carry out such programs.

The EPFF should explain how the Forest Service assesses its research needs and how it establishes priorities to determine which projects are to be funded.

EPFF is not an operational policy document. It may influence management changes, but certainly introduces no bold new system for accomplishing those changes.

The EPFF notably lacks any discussion of the Forest Service's own management system. The EPFF should describe the Forest Service decision-making process in detail and discuss deficiencies and ways of remedying them.

The plan lacks a timetable (or milestones) for achieving its goals. Program managers would find it difficult to assess their progress in meeting 10 year objectives.

The draft plan avoids any substantive discussion of controversial policy matters such as use of ORV's in National Forests, livestock grazing, and intensive forestry practices.

The resource information presently available to planners is in many cases insufficient for making responsible management decisions. The EPFF should assess the data gaps which exist and propose methods of filling them.

The Forest Service has pretended to present an unbiased vision of the debates and controversies surrounding Forest Service management practice, but in fact, they have violated the most basic rule of debate by presenting a strictly "in house" document which does not register any alternate or opposing viewpoint.

To increase all programs and activities at present or accelerated rates is guaranteed to put intolerable strains on the multiple use doctrine and render it meaningless. Yet the moderate and high supply alternatives would give us more of everything: more water quality, more timber cutting, more road building, more sediment reduction, more recreation sites, more clearcutting, more wilderness studies, 5 million more AUMs, more deteriorated range under treatment - more dust, more clean air, more noise, more silence, more people, more solitude.

Perhaps the most serious flaw of the "key indicators" is their lack of comparability to each other or to their costs. Thus the EPFF purports to show three levels at which the entire program of the Forest Service can be carried out in terms of the "key indicators." These three levels, of course, require three levels of funding. However, the cost benefit

situation for the three levels is not shown. Even gross budget estimates of the three programs and their components would have been helpful. As it is now presented, one cannot see the EPFF or its components in a sensible perspective. The present document (EPFF) should be discarded. A new long-range plan should be written using much of the factual data base developed for the EPFF, along with considerable input from expertise outside the Forest Service and resubmitted to the public for review and comments.

The data used is both outdated and inadequate.

The section on Systems Comparison (VI-1-22) makes no attempt to give a dollar value when it compares, across the board, the costs of various activities. For example, billions of board feet of timber are compared to numbers of youth trained and again to numbers of working days. This is as meaningless as comparing apples and oranges. The theory behind this is, apparently, that money solves everything. If only we allow the forests to be overcut, overmined, and overgrazed, then more money is promised to help repair the ravages caused by these operations.

Exceedingly fine print discourages reading. Indeed, the fineness of the print tends to convey the idea that the detail is not important.

We urge the Forest Service to address itself to an Environmental Program for the Future that places the emphasis on Environmental Quality rather than maximum use of our finite resources.

Two examples of inane statements are "Neither this document nor endorsement of one of the three supply alternatives irretrievably commits resources. This document is only an overview for general long-range planning." (page VII-27), and "Following a nuclear war, wood products would undoubtedly be overtaxed to rebuild society, perhaps on a world-wide basis. Planning timber supplies for such a contingency appears rather futile due to the extreme uncertainties involved." (page VII-52). Such statements waste paper and time, and only serve to confuse issues.

There are two major deficiencies in the way the systems are set forth which obfuscate the true nature and scope of the program being proposed. First, the systems fragment and scatter the major activities of the Forest Service. We have discussed at length above this treatment of the wilderness program. Similar treatment is given to Timber Management. Its many aspects are scattered here and there. As a consequence, the dominance of this program is masked.

Unfortunately, it is not possible to provide all goods and services in maximum quantities. For example, if timber harvest is increased, erosion is higher, visual disruption is increased, and other values are sacrificed. The proper combination of multiple product output is a classic economic problem which could have been well treated by complex economic analysis. The correct analysis would choose the policy which provided housing at low cost to purchasers and low cost in public terms. The Forest Service can directly control only timber stumpage prices on their lands and do not coordinate their housing goals with other public

and private groups which exert equal and greater influence on housing costs. It is not surprising that the Forest Service believes that they have this responsibility and can accomplish this difficult task. The level of environmental mitigation is properly set for each level of disruption regardless of the value of products removed. It is the level of production which should respond to the consequences of the damage imposed, not vice versa.

The effect of energy shortages on hunting is not mentioned (p. IV-8). On the other hand, the Forest Service expects ORV use to double by the year 2000 but says this "is of course strongly influenced by the availability and price of fuel" (p. IV-9). Last of all, "the fuel shortage may have only a limited effect on skiing unless gasoline becomes extremely scarce" (p. IV-9). No explanation is given for these varying and inconsistent appraisals.

It appears from page IV-5 that the demand discussion was simply an extrapolation from trends. Such extrapolation alone are inadequate for planning. Even as trend projection, however, the EPFF discussion is inadequate. For example, the energy situation is constantly acknowledged to have an impact on recreation demand trends. However, in appraising this effect, the EPFF is all over the lot. Thus, "Camping is expected to increase 19 percent per decade on Forest Service land if the fuel situation does not worsen, but less if gasoline prices continue to rise" (p. IV-7). On the other hand, "Fuel shortages will likely curtail wilderness use...(p. IV-8 but "not to the same degree as camping". (!)) As for fishing, "it is likely to be heavily influenced by higher fuel prices and gas shortages." However, we are not told which way (p. IV-8).

The definition as stated on VII-2 of "vegetation, soil, air, water, and animals including man, make up ecological systems or "ecosystems" completely ignores the most important concepts of time and dynamics. The character of ecosystems is continually changing under natural or man-caused conditions of environmental stress and none of the Forest Service alternatives recognizes this fact. No changes in congressional appropriations will change the manner in which natural systems respond to disturbance.

Forest Service policy generally has, with a few minor exceptions, never evidenced a very sophisticated understanding of esthetics. The EPFF continues the tradition.

The United States Forest Service has not outlined in the EPFF how the Service can deal with a broad range of problems which include: 1) Wilderness recreation demands; 2) Negative environmental effects of forest road construction; 3) Soil nutrient depletion and its effects upon sustained yield; 4) Balancing timber output with limits imposed by consideration of maintenance of hydraulic equilibrium in forested watersheds; 5) Soil erosion as it affects site index and thus sustained yield; 6) Fire ecology; 7) Insect ecology; 8) Conflicts between public and private timbered land utilization.

Since the program does not make evident the manner in which the relative priority, if any, between the various activities was determined, we are unable to comment intelligently on the appropriateness of the proposed magnitude of these activities.

The discussion of the effects of "transportation systems and access" on the environment makes clear the complexity of those problems and makes me realize how inadequate is my knowledge and the knowledge of most voters.

Short-Term Use, Long Term Productivity and National Economic Outlook: There needs to be a discussion of stumpage rates and recognition that low rates in effect in areas such as southeast Alaska represent a subsidy to the timber industry at the expense of the taxpaying owner of the forest. Timber sale receipts need to be adequate to pay for the costs of fertilization, reforestation, and other programs resulting from logging activities.

On page III-3, the Industrial Era, we feel should have the dates 1945 to at least 1970, and not until 1960. The very extensive clearcutting on the Flathead National Forest and adjoining National Forests; i.e., Bitterroot N.F., during the mid and late 1960's we believe are proof positive and testify to the "Industrial Era."

Found it difficult to assess and assign a "low", "moderate", or "high" category simply because of the inconsistencies, and I fail to see how this kind of an inquiry will result in solid guidelines for action.

On a national basis, most respondents cannot assign levels without knowing the current, possible, and prudent level of operations.

Would have preferred a checkoff statistical presentation of the data which would have allowed ranking some programs listed under high supply alternative in the low supply category or moderate supply category. This would have provided a less biased and more truly representative picture of the program and their output levels.

There are not enough quantified, measurable units in the descriptions of separate alternatives. Terms such as: "some", "reduction", "increase," and "more effective" are extremely vague.

General assumptions of the EPFF are in part faulty: 1) All forests are treated as one; 2) All states are treated alike; 3) All elevations are treated as one; 4) The U.S. Forest Service ignores research activities of other government agencies; 5) Assumption that population will increase as it has in the past may be an attempt to be realistic, but it should not be assumed as a fact; 6) Demands at times confused with needs. Needs should be met but not at the expense of earth.

It should be noted, in passing, that the alternatives were misnamed. By using the term "moderate" for the middle alternative, instead of the term "middle", the implication is left that the "low" alternative is absolutely low, not just relatively low, and that the "moderate"

alternative is absolutely moderate, not just relatively moderate. In fact, as the EPFF states, the "low" alternative is the present level of Forest Service programs (pp. VI-5, 6 & 7). In the area of timber sales, the present program is a very "high" program, not a low program. On the other hand, the review of Roadless New Study Areas is at present a very "low" program. Thus, the use of the terms "low", "moderate", and "high" are confusing and should be replaced by more apt terms.

In a word, the EPFF ducks the issue. It does not give us a clear picture of the resource it purports to plan for. It does not tell us what the relative values of those resources are, either in general or by type or area or in any way. It identifies no resource conflicts, and it makes no attempt to determine an optimum mix of uses.

One of the keys to good planning is to ask the right questions. A broad planning framework such as the EPFF should have posed questions in a way which would lead to conflict resolution. Examples might be questions concerning environmental problems such as: 1) What are the appropriate indicators of environmental quality against which resource production gains should be measured?; 2) How can resource inventories adequately classify land as to environmental qualities and capabilities?; 3) What are the appropriate environmental quality indicators for various physiographic divisions of the country?; 4) Should different regions have different standards or levels of environmental quality?

See little benefit in assessing programs as presented in this manner. The question of what level is obvious - we should do more of everything and do it better. But this is begging the question because we can't do everything and do it better without making sacrifices somewhere.

Many feel that some of the Forest Service's programs are far too big now. In particular, many people believe the Service's timber sales program is destroying the National Forests through overcutting. Many also believe the Service is an overstaffed bureaucracy. While it is hard for any agency to seriously consider a reduction of its program or manpower, we believe that such an alternative should be considered in any major planning effort. Reorganization of the U.S. Forest Service is not considered, yet such a reorganization could be very beneficial and accomplish more goals than any of the supply options under the present organization.

Another flaw with the alternatives presented is their lack of imagination. They represent nothing more and nothing less than present programs. Nothing new is considered and the termination of nothing old is considered.

Am impressed with the range and scope of the Forest Service EPFF plan and particularly interested in the fact that the Forest Service will implement all activities in front of the public - and seeks public comment on various phases of the protection and management of our forest resources.

We would like to commend the Forest Service personnel for this draft of long-term forestry plans. They have covered the six systems and support activities so thoroughly, it is very hard to make any constructive comments. It was a job that was needed. One thought to consider would be the ups and downs of our economy. It might be well on the downs to withhold enough public contract bids to protect the private sector of lumbering so as to have an equal flow of lumbering on each public and private, and at prices to pay private owners to sell.

In general, the EPFF provides the public with insufficient information to make realistic or meaningful choices from the three alternative activity levels. By the same token, there is no way of knowing whether the three option sets for the various resource systems are a true reflection of the alternatives which the Forest Service apparently feels it could achieve.

How can the Cumulative Funding Rate--National Forest System--Nationwide (2/1972 figures from Region 8, NFS) reduce Range Management 81 percent and up Reforestation-Timber Stand Improvement currently at only 39 percent? Certainly Soil and Water Management needs to be increased from 52 percent.

For the sake of the lay-person, such as myself, a few short paragraphs outlining the history of the National Forests. National Forest Service - how long in existence? Why brought into being? How brought into being? Where does your money come from? Where does the money you earn go?

Inclusion of a U.S. map showing location of National Forests and National Grasslands.

Would recommend that the "Long Range Forestry Plan" be modified (or phased out) in order to meet and ascertain the recommendations of the Land Use Unit Plans now being conducted on each National Forest. These plans are particularly more detailed and comprehensive, and allowing for public response at the local, regional, and national level.

Do not believe that this report fulfilled the expectations that I had hoped it would when it first came out. Despite the good intentions of this report, it has failed as "A Long-Term Forestry Plan", and particularly as a forum and vehicle for public response and participation.

If, as you claim, skiing use of the National Forests is expected to increase during the EPFF period, why is this not reflected in increasing ski area revenue (Table VII-4, page. VII-36, line 4)?

The title leaves the impression that the program is for the whole country but the Introduction says National Forest. The Systems Evaluation starting on V-12, is confined to National Forests. Yet in "Research" and "State and Private Forestry," private land is included. All this ought to be clarified.

The "Systems Display Charts" are probably quite useless to most readers. If kept, they should be in the Appendix.

In these charts under Research, the only place I could find anything about research to help the small woodland owner (most of the forests) was under "Urban Environments."

Table VII-1 is not clear to me. Three alternatives of what to change vegetation, timber production, or actions in left column. Does this mean low, medium, and high amounts of clearcutting or timber management? How is the difference in vegetation disturbance between clearcutting and other harvesting methods shown?

This "program" has so little detail that it is difficult to make anything but general comments that are almost worthless. This is really not a plan but a set of priorities, which in their context are difficult to assess.

Evaluation of EPFF was made difficult because of the absence of dollar figures on all of the proposed systems and research activities. Without dollar figures it is hard to evaluate a particular program when all that is different about the alternatives is an increase in numbers.

Another part of the EPFF that is hard to swallow is the assumption that all the research will result in the desired outcome.

The parameters cited in the 3rd paragraph, page IV-13, appear to be in error; that is, 97 percent BOD removal should require 20 times the dilution of 70 percent BOD removal.

Hope this document is effective in inspiring Congress to better appreciate the place of our renewable natural resources in the national economy now and in the future.

Extremely difficult to rate systems and research activities as several components were included under each alternative.

Activities should have been stratified on a regional level.

Page II-1. Use the SAF definition of forestry in paragraph 3. I believe the SAF definition has a broader base of acceptance within the profession and is a better definition than the one used in the EPFF report.

Forestry. The old definition of forestry has been changed, but many people do not recognize the word in its newer multi-use sense. Therefore, many people will continue to interpret your meaning wrongly. I strongly urge that you add a chapter where you clearly and directly state your new definition. This would be a statement of policy which might capture attention and convince many that the Forest Service is not the organization they believe it to be. Perhaps such persons can never be convinced. However, they must be shocked into recognizing that their old prejudices may be false. I would like to see a statement on

the Forest Service policy on wilderness, on management of non-game animals, on endangered species, and even on multiple use.

The attempt is definitely worthwhile - provided us with much to think and debate about. The open systems display was particularly good. We look forward to the actual long-range plan or next draft. We are also interested in who you sent the questionnaires to.

Explanation, justification, and documentation of the basis for the determination and distribution of the various categories and amounts of work activities assigned to the resource systems in Chapter VI. There is a gap between the essentially descriptive material in Chapter V and the series of decision or conclusions assembled in Chapter VI. This makes comprehensive evaluation and enlightened comment extremely difficult.

Perhaps the most serious deficiency of the initial draft copy is the lack of cost estimates. While it is implied that the cost benefit ratios will be favorable if the high program level is practiced for all six systems, there is no concrete evidence to substantiate this implied assumption. If one assumes that financial constraints will result in the necessity of determining priorities, it is absolutely essential to have appropriate economic estimates at hand when establishing priorities.

The first three chapters are good background for those only incidentally acquainted with the National Forests. They are stated with authority.

The relation of the "high level" alternative to production potential could be estimated. Is "high level" equivalent to full production potential or is it still temporizing? Chapter VII - p. 30, indicates that the "low level" is 41 percent of potential in terms of timber - what percentage of potential are the other levels?

The EPFF should analyze the impacts of the Forest Service's personnel policies.

The EPFF should describe the types of budget decisions which are made outside the Forest Service and the way they affect its program. In the past ten years, what levels of funding has the Forest Service proposed to OMB, and how much has OMB approved?

The EPFF should describe the Forest Service's administrative structure, including both functional and geographic divisions. It should discuss the interrelationship between National Forest program and cooperative forestry programs. It should explain what types of decisions are made at the local, regional, and national levels, and how these levels interact in developing annual programs and annual budgets.

The EPFF should describe in detail the Forest Service's plans for preparing environmental impact statements in compliance with NEPA, including the specific actions and programs which will be accompanied by NEPA statements and schedules for preparing those statements.

The EPFF should set forth the procedures the Forest Service follows in determining whether or not to grant pipeline and utility rights-of-way.

It is sometimes confusing whether U.S. Forest Service land is being talked about or other public and/or private land.

Began with an "open systems" approach but then when we went back to evaluate we had to do it through a "closed systems" approach--thus, it was unclear as to how much consideration to give to overlapping or conflicting resources.

As an acceptable, defensible, proposal for growth, this document will satisfy. For those who are really interested in alternatives, it offers little of promise.

There should have been a great effort to show the interrelations among all the forest values and activities. For example, there was little or no emphasis on attaining several values from the same forest or woodland. Stress was more often placed on separate uses for separate places on the same National Forest.

The report is replete with examples of linear concept with respect to both expenditures and returns. For instance, if we spend more money to stabilize erosion, then a direct line improvement in the total forest environment is expected. No evidence is presented that we need to stabilize erosion on the suggested acreage. Again it is suggested that if more money is spent to remove all debris from streams, then everything in the environment would be that much better off. I seriously doubt that this is indeed true, and certainly no evidence is presented. Research expenditures and return assume the same linear scale, and I know this is not the case.

A slightly more philosophic discussion of major resource management issues would, I believe, lend additional perspective. This might significantly enlarge public understanding of the serious issues involved and the conflicts in which a notably conscientious agency finds itself. For example, most specific resource issues such as clearcutting or wilderness classification seem to me to rest to varying degrees on three encompassing and difficult to solve matters: (a) the balance to be struck among national, regional, and local interests; (b) naturalness vs. various degrees of manipulation in resource management; and (c) the emphasis (or lack of emphasis) to be placed on long-term investment.

I feel allocation of resources is not the best. More bureaus or agencies should take over some of the responsibilities delineated herein.

(1) The organization of the report is well defined. (2) The introduction (page I-4, second paragraph) states that the policies will be dynamic but does not specify any continuing input by the public, during the implementation phase. (3) The second chapter is well written. However, objectives 4, 5, 6, and 9 (pages II-3 and 4) should be explained. The "System" discussed in Chapter V seems incomplete, e.g., Wildlife and Fish Habitat System, in that just what, who, and where is involved is not clear at best. (6) The display

charts for this chapter are difficult to understand and/or use, i.e., of questionable value if they were not designed to be confusing. Although the concept of a matrix is desirable, it should be functional/usable. (7) The description of the supply alternatives (pages VI-5 and 6) is well written. The definition of "high supply alternatives" is not accurate, the stated objectives of the "high supply alternative" does not seem to "substantially" increase the goods and services produced by the National Forests as defined on page VI-6. (8) In assessing the "Effects on the Human Environment," Chapter VII, the impact statements of varying importance are made with little, if any, substantiation, e.g., page VII-14, second paragraph, the statement that the impact of road construction will be "offset" by planning and road design is indefensible. (10) Also found throughout the impacts chapter, Chapter VII, there is a consistent implication if not explicit statement that the high level alternatives is the best and should be supported. What happened to objectivity?

The public is aware that this is an extremely biased report. Choices are all related and manipulated so we are forced into picking certain alternatives over others. In many cases, certain alternatives presented here are not feasible.

From the point of view of overall policy, I'd like the Forest Service to make some projections about how it would change its allocation of effort given: (a) different alternative future demands; (b) a range of objectives from pure aesthetics and amenities through various mixes to pure goods and services production; and (c) various levels of funding.

Page VII-29, last paragraph. It seems to me the report really goes out on the limb by predicting with the high supply alternative, increased supplies would nearly stabilize lumber prices.

The bureaucratic desire to increase public investments is evident. A more modest and saleable policy will be to increase resource benefits by reallocating funds and redirecting program activities.

The bar graphs which do not start from zero are easy to misinterpret, and in several places create a very distorted view.

- X X Need glossary of terms, page I-2. "Determine the highest value combination." What is a value?, page I-3. What is "optimum?" This word can be used to justify anything.
- X X Figure II-1, should be updated to include the latest data available.
- X X Chapter II-1. At the end of the first paragraph, add "Through cooperative programs, the Forest Service provides support to the forestry programs of State and private lands through funding, training, and technical assistance."

- X X Page II-3. Under authorities that are particularly important to the Agency's basic mission, add: "Endangered Species Act of 1973 (P.L. 93-205) established policy and authority for protection and management of endangered and threatened wildlife."
- X Y Page II-3. NEPA should be listed under the section on basic authorities and objectives.
- X X Page II-7. An obsolete map was used which does not include the Virgin Islands.
- X Y Page II-8. At end of Fish and Wildlife paragraph, add: "Special attention is given to protection and development of habitat for endangered and threatened species."
- X X Page II-8. Emphasis is on recreation facilities - maybe that's where it belongs, but it seems to me that the emphasis should be on the land and opportunities rather than facilities.
- X X Page III-6. In discussing clearcutting the arguments against clearcutting are not properly covered. While it is perhaps true that the visual effects are what most trigger public reaction, there are significant reasons for avoiding clearcutting as a standard harvesting method. Such as: Difficulties in natural regeneration of large areas, large scale erosion, increased runoff resulting in flooding, loss of climax habitat, and increased susceptibility to disease and insect epidemics associated with even aged single species stands. If it is to be Forest Service policy in practice that clearcutting be only used where necessary, these hazards should be recognized and pointed out in the report.
- An example of a false assertion is, "And further, livestock grazing greatly restricted (page III-7). There is simply no factual basis for this statement.
- X X Page III-7. Third line after "water development," insert "and wildlife habitat improvement."
- X X Page III-11. Last paragraph at beginning of second sentence, add "It is argued that ..."
- X X Page III-11. In the last sentence of the next to last paragraph after "landscape aesthetics," add "to protect habitats of those wildlife species that depend on old growth forests."
- X X Page III-12. Old growth conversion is given as a controversy the Forest Service is to face in the next 10 years. However, only the argument for increasing the cutting rate is given. The arguments for preserving old growth areas should also be presented.

X X Add to page III-14, Forest Roads - A large segment of the public views road construction on the National Forests as a prime cause of environmental damage. Another public views road construction as a democratizing influence which permits more people to use more of the National Forests with greater ease.

X X NEPA should be listed under the section on basic authorities and objectives, page III-6. In discussing clearcutting the arguments against clearcutting are not properly covered.

X X Page III-14. Include another current issue as follows: Endangered Wildlife, Fish, and Plants - The public is demanding that habitats for endangered wildlife, fish, and plants be given the protection needed to insure that such species recover to viable populations that are no longer endangered or threatened.

X X Congress responded to this public demand by passage of the strong Endangered Species Act of 1973 (P.L. 93-205, December 28, 1973). This Act strengthens the Forest Service authority and responsibility to protect and enhance habitats for endangered and threatened wildlife species. Section 7 of the Act states: "The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal departments and agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to Section 4 of this Act and by taking such action necessary to insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected States, to be critical."

X X It seems clear that the Act sets up the preservation of endangered and threatened species as a high land management priority. It will necessitate: (1) an accelerated program to define and locate the critical habitats for all listed species; (2) careful review of plans for all action programs within these areas; and (3) such modification of these plans as is necessary to insure protection, and where possible, enhancement of habitat during implementation of the plans.

X X Chapter V, page 2, Recreation and Wilderness. Change first sentence to read "The Recreation and Wilderness system provides a substantial amount of outdoor recreation opportunities and the major wilderness experiences for the Nation."

X X Page V-3, in fourth line after "they control," add "most resident."

X X Page V-6, under wildlife and fish habitat system in the block for "Recreation" programs, add "bird and animal watchers and other non-consumptive wildlife users."

- X X Page V-6. Under Human and Community Development System in the block for "Wildlife and Fish Habitat" programs, change the wording as follows: "Hunting, fishing, and other enjoyment of wildlife adds to rural community income and employment. Provide suitable spawning and rearing habitat for important commercial anadromous fishery."
- X X Page V-7. Coop Law Enforcement, sixth column. The words "game and fish" should be inserted between "local" and "laws."
- X X Page V-8 - Land and Water System column. It seems to me that there should be a statement included for "Fire Prevention and Hazard Reduction" and "Fire Detection and Suppression."
- X X Page V-8. Under Fish and Wildlife Habitat System in the block for "Recycling Sewage and Effluent Waters," add "and mitigate adverse effects."
- X X Page V-10. Under Wildlife and Fish Habitat System: (1) In Comprehensive Resource and Area Planning block, add: "Includes protection and development needs for threatened and endangered species."; (2) In Cooperative Assistance in Forest Management and Processing block, add: "Advice on means to protect endangered and threatened species habitats."; and (3) In Cooperative Forest Fire Control block, add: "with particular emphasis on endangered and threatened species."
- X X Page V-11. Under Forest Pest Control and Environmental Quality Protection--More emphasis is needed on pollution aspects and environmental quality enhancement. Under each section the statement "and use of those methods which minimize impacts" would be appropriate.
- X X Page IV-2. Table is hard to comprehend. Suggest true value rather than value relative to 1970.
- X X Page IV-2. "Even the lowest estimates those derived from forest resources." Isn't this what is being debated? Lifestyles could change to where there is less demand and need for more goods and services.
- X X Page IV-5. How can one disagree with the Bureau of Outdoor Recreation? Is the 40 percent increase per decade actual increased use or change of counting system?
- X X Page IV-8. At bottom of page, add a new paragraph: Nonconsumptive Wildlife Enjoyment--Bird and animal watching, and bird and wildlife photography, are becoming major recreation activities within the National Forests and National Grasslands. In the United States in 1970, (Fish and Wildlife Service, 1970) it is estimated that nearly 12 million persons spent 472 million recreation days in these non-consumptive wildlife pursuits. This is more than double the recreation days spent in hunting. Based on current interest and past trends, it is expected that these activities will become increasingly popular in the future.
- X X Page IV-13, paragraph 3. This paragraph does not seem logical.

- XX Page IV-14, 2nd paragraph. It seems to me that there should be a section included that talks to the recent high retail beef prices and lower per capita consumption of beef.
- XX Page V-13, footnote 2. I wish we could talk in terms of pounds of beef produced, etc., instead of AUM's.
- XX I had trouble with the "systems evaluation" Page V-12-14. Although these are "key" indicators only, they did seem to reflect activities that are easily measured and are aimed at increasing outputs.
- XX Section VI: The graphs in Section VI indicating different program levels are so misleading to the degree that I find it hard to believe they were not intentionally drawn in an attempt to mislead the public and create comments which could be used to justify favored alternatives. While each individual graph may be technically correct, the horizontal scales have been varied in such a way as to make accurate comparisons between graphs extremely difficult. The casual reader of the graphs would be led to conclusions which are totally untrue. For example, visually comparing the graphs for (1) water quality improvement, (2) allowable cut, and (3) total recreation use seems to indicate that the relative change between the low supply alternative and the high supply alternative is about the same for all three programs. The increase from low to high for range grazing in AUM's seems to be much larger than any of these three when looking at the graph... However, when you look at the actual numbers involved these impressions created by the graphs are clearly wrong... The change for recreation is only about 8 percent ... for timber ... approximately 25 percent ... water quality improvement represents approximately a 300 percent increase ... Range grazing, where the graph indicates tremendous increases ... about 40 percent. If the graphs were prepared so these true differences were reflected, I believe the comments might be very different. The graphs are misleading and will bias public comments concerning different alternative levels.
- XX Page VI-1, Management Policies and Assumptions. The first six words of the second sentence should be removed. They infer that Forest Service has followed these in the past; not so.
- XX Page VI-2. At end of first paragraph, add: "Policy and direction for protection of threatened and endangered species habitats provided by the Endangered Species Act of 1973, will be followed in all activities."
- XX Page VI-2, Economics. "Over the long run" should be inserted some place. We are not enjoying relative full employment and economic growth in last half of 1974, first half of 1975.
- XX Page VI-1, Environmental Standards, second sentence. The Federal Register reference and date should be inserted in the sentence.
- XX Page VI-3, Landownership, last sentence. Should a footnote be added and statement saying what is happening in Alaska?

- X X Page VI-7, Major program alternatives. The statements about Research are not logical. "Understanding the role of scientific research in the total productivity of the Nation's forest resources" will not be achieved by "independent" examination of research, but only by an examination of the program needs in relation to available technology and information. A basic misunderstanding exists in the Forest Service of what the purpose of research really is.
- X X Page VII-17. In last line of last paragraph, add: "silting of fish spawning gravel."
- X X The report is misleading and inaccurate in certain instances. Example: page VII-23, "But in unstable areas, increased road construction would temporarily reduce anadromous fish productivity." The word "temporary" is grossly inaccurate.
- X X Page VII-23, second sentence. The statement that "the low supply alternative would provide the greatest national anadromous fish productivity" is questionable. The low supply alternative does not provide for improvement of spawning and rearing habitat. Also, the high supply alternative provides for better coordination to protect and improve habitat.
- X X Page VII-27, fourth paragraph. Although I know what the author is intending to say, "the high level alternative would make the most irreversible, long-term resource commitments", I disagree. The most irreversible commitments could very well be made at the low levels because of lack of knowledge and balance.
- X X Page VII-34. Second line, change "livestock grazing is the principal use...." to "livestock grazing is a principal use...." The forest and range ecosystems provide habitat for wildlife on every acre. This is also a principal use of these lands.
- X X The picture on page VII-58 is misleading. If the upper picture had been taken from the same distance and angle, and at the same time after cutting as the lower picture, there probably would be much less apparent difference.
- X X It is stated in Summary and Discussion, VIII-1, that the "choice selected should be based on a valid appraisal of the relative values of the various goods and services and their costs." Costs of producing the outputs at the various production levels is rarely defined. It may be appropriate to describe in general terms how much our annual appropriations would need to be increased and the dollar amounts of increased taxes necessary to supply these commodities at the various option levels. This would be a major undertaking considering the variables involved, but there must be some foundation on which the public can say "I want this output level and I will pay \$10/year or \$50/year to acquire it, or, I will accept the consequences of reduced expenditures in the fields of national security or foreign aid, etc., to acquire this output level."

- X X Table VII-4. Is the receipt figure for 1962-1972 correct? National Forest management has more than paid its way since 1951, and receipts were \$450 million in FY 1974.
- X X Transportation Systems and Access, page VII-4, paragraph 3. More is needed than outlined here if road construction is to not have adverse effects on soil movement and water flow quality.
- X X The chart on page VII-6 lists 1.5 million cattle and 1.7 million sheep graze on National Forest lands. The text on page VII-6 lists 2.8 million cattle and 3.4 million sheep.
- X X Page VII-12, line 5. Research with which I am familiar has shown that the major gaseous component of wood smoke is carbon dioxide. It seems highly unlikely that fires burning freely in open air would produce carbon monoxide. This error is serious, because CO is poisonous while CO₂ is essential to life of all kinds.
- X X Under Chapter VII, page 14, Transportation Systems and Access - Some confusion arises here between the EPFF draft and the Highlights of EPFF. On page 20 of the Highlights, zero miles of general purpose road will be constructed under the low option. Forest Service built road shows as 1,200 miles in EPFF. Similar discrepancies occur for moderate and high options. If there truly isn't a discrepancy, then the EPFF should show that the 1,200 miles (low option) is being built primarily for timber purposes.
- X X Page VII-15, line 3. It is high time that we used correct terminology. "Selective" cutting is logger's choice. The proper term here is "selection." See the SAF "Terminology of Forest Science, Technology, Practice, and Products."
- X X Page VII-15. "Only 5 percent more roads needed under high supply level than under moderate level." Not so, according to table on page VII-15.
- X X Page VII-15, last paragraph. "Temporary increases in soil erosion will occur...." This statement is not true. Erosion will occur only if the land slopes with sufficient steepness, cleared areas are sufficiently large to develop surface flow of sufficient volume and velocity to move soil, rains are of sufficient intensity and duration while soil is exposed, and soil denudation is sufficiently complete to permit surface flow to develop.
- X X Pages VI-23-25, Research activities. Listing this great array of research items has several dangers. One is that a false impression is given of a massive program that will take care of all foreseeable problems.
- X X Research program "Protection of wood in stumpage and use" on page VI-25 should read storage and use.

- X X Evaluation of Resource Management and Market Development, page VI-32. I see nothing here on the water resource and research on the possibilities of water yield improvement.
- X X The wording in the second paragraph on page A-3 is poor. To the uninformed it indicates that portions of the 25 percent funds are used for reforestation and TSI. "Ten percent of receipts are (good) for road construction...."
- X X Page A-7. Change "Bureau of Sport Fisheries and Wildlife" to "Fish and Wildlife Service."
- X X Appendix A, page 17. There is an apparent conflict in the acreage figure in the first and last paragraphs on this page.
- X X Page A-20. (1) Change the first word on the page from "through" to "during." (2) Second paragraph, line 3. Region 8 has, by itself, exceeded the figure of 77 quit claim deeds issued for all recent 5-year periods. Region 8 has issued the following quit claim deeds for each of the 4 possible consecutive 5-year periods during the last 8 years: 113, 125, 109, and 114. One hundred and fourteen were issued in the most recent 5-year period from 1970-1974.
- X X Page A-34, add the following: Protection of Endangered and Threatened Species - The Endangered Species Act of 1973 charges all Federal Agencies with taking such action as is necessary to insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of endangered species and threatened species, or result in the destruction or modification of critical habitats of such species.
- X X In accordance with this Congressional directive, all State and Private programs that involve expenditure of Federal funds will be carefully reviewed with State Foresters and State Fish and Game Departments to insure that these programs do not adversely modify critical habitats for endangered or threatened species. Possibilities for habitat improvement will also be given careful consideration.
- X X Appendix A, page 34. Wouldn't it be desirable to include the Department's Rural Development Programs under State and Private Forestry Program Responsibilities?
- X X Page A-41. Under Pollution Amelioration--Ameliorate means to make better or improve. Is this the best term to use? We feel the term should be changed to "Environmental Enhancement."
- X X Appendix A, page 56. Equal Employment Opportunity Activities is given top priority attention in the Forest Service. Providing equal opportunity for minority groups and women is a major objective. This important facet of our Human Resources Development Program is worthy of additional exposure in the EPFF.

- X X We feel that the CI-13 Summary is good and that it probably reached more people than if just the complete EPFF had been circulated.
- X X The publication could have been edited and presented better. For example, Table I on page 5 is rather poor: It is difficult to relate the various projections in terms of total quantities; skiing is "likely to have a 15-20 percent increase continue," other increases are per decade, but skiing has been increasing 15 percent per year--the average reader would assume that skiing is increasing at the same rate as fishing.
- X X One projection that should have been included in Table I, page 5: "There will be an increasing demand to set aside for special consideration and use (thru zoning, modification of total usage, single, dominant or preferred use) more of the present land base so that true Multiple-Use will be practiced upon a smaller land base. A sufficient land acquisition program will be needed to replace this acreage so removed and add the additional acreage all the functions will need to take on more than a low supply level program."
- X X The graphs (in CI-13) were misleading--until I muddled through the EPFF draft.
- X X In view of the Chief's memorandum of August 12 inviting all Forest Service employees to comment on the EPFF, we were disappointed with its availability. Many of our people were required to read only CI-13 because the complete draft was in such short supply.
- X X Page 21 of CI-13, second paragraph. If this is the best statement we can make of the "role" of research--we got big problems! Many research statements of objectives are not intelligible to us non-Ph.D. mortals. Query: Did the CI overdo the research bit?
- X X Please don't use that damn fine print (page 11-20). This is not an insurance policy.
- X X The number of pages devoted to questions on research programs as opposed to NFS and S&PF indicate either a lack of proper perspective or of coordination in preparing this questionnaire.
- X X Only obliquely does the document seem to state how we're going to "encourage improved management of the 59 percent of the Nation's commercial forest acreage held in nonindustrial, private ownership."
- X X Research should be more firmly justified--somewhere the statement should be made clearly and emphasized by discussion, explanation, and examples, that research is essential to achieve the stated objectives of the several alternatives.
- X X The format used practically forces a "high" level. Selecting anything other than high is about like being against motherhood, apple pie, and the flag.

- X X A very serious bias is built into the output indicators selected; namely that all are positive. In reality, many outputs have numerous and severe negative impacts (which may be reduced but not eliminated), some of which are more important than the desired output....adverse impacts are downgraded....and prefaced by such terms as "probably," "could occur," etc., while beneficial effects are upgraded in importance and stated as positively occurring. In total, this results in a major deception....
- X X I appreciate the effort that went into the report and your honest effort to contribute something positive. At the same time, there is the overriding sensation of power plays being made to build functional empires. This is especially true in the research area. Specifically, I feel there has been much unrealistic thinking--some nonsequitur and some just "pie in the sky" and some that borders on nonprofessional. Many of the high alternative items are used as bait to force selection or forego any tangible results. This is especially true in the research area and it smacks of unethical practice.
- X X Throughout the document, the objective of achieving sustained yield needs to be more clearly recognized.
- X X A sense of "mission" or what we think "should" be done is completely missing.
- X X If we really want good public involvement, we must publish clear, concise single documents that they can read and understand. I would guess that not many people would sit down and read EPFF unless they themselves have a burning interest in the program.
- X X Many of the goals are too general, they may be spelled out in the EPFF document, but the condensed EPFF omits many specific goals.
- X X The way the plan is written is confusing and hard to understand. This discourages a great many people who have valid input from replying.
- X X The figures listed as goals under each alternative are so large that they are difficult to comprehend. Perhaps to someone familiar with work planning at the WO or Regional Office level, miles of roads, campground capacities, or acres of land for the entire Forest Service have meaning. To someone on the District, however, who is more use to talking in terms of 10's and 100's, or maybe 1,000's, the large figures in the plan lose their perspective.
- X X The introductory portion of the EPFF contains directly contradictory statements. First, it claims that the Forest Service manages each forest for sustained timber yield. Then, it indicates there is disagreement over the speed of converting old-growth timber.
- X X We find it very difficult to make meaningful comments since S&PF activities are not clearly defined. We assume the "level of activity" is an annual figure--but at times it is unclear whether an annual total is intended or a 5-year figure. Specific production goals for National Forests are shown, but goals on private lands are not so clearly shown.

- X X Lack of consistent time-span is confusing. Text and displays discuss use and outputs using periods from 5 to 26 years.
- X X You are asking us what we want from the National Forests. With the data provided (Highlights of the Environmental Program for the Future) this is an impossible question to rationally answer.
- X X Bad scene--we invite people to write for the EPFF and the CI then don't have enough to send them.
- X X The time of distribution of the materials was rather poor. Copies reached the District on 12/6/74, and came to my attention on 12/10/74. It is hard to review adequately by 12/15/74.
- X X Have the feeling after reading the information that we don't really give a damn whether it is useful or whether people respond or not.
- X X I found the research alternatives in many cases unclear and often inconsistent with the definitions. Research needs to redo their alternatives in many categories. They need to rethink their proposals and do a better job. Send them back to the drawing board.
- X X The Plan was written in such a way that it was extremely difficult to understand. It was necessary to "shuffle" back and forth through the pages numerous times in order to comment on just one system. The plan written for the "Hebgen Lake Planning Unit," on the other hand, was the best written I have reviewed, as it was so easily understood by the average person.
- X X It will not benefit agency or public if cynics or others unable to analyze the EPFF as presented decide to discard good with bad and simply write off the EPFF as an agency "snow job" to gain lobbying support.
- X X We suggest that the term "non-Federal land" be eliminated throughout the draft. Instead, use "State and private land."
- X X In discussing the outputs produced at each level of activity within a resource system, the draft EPFF fails to identify priority outputs.
- X X We feel the document could have benefited had it undergone editing and a rewrite. Continuity from one section to another is poor and it appears the various authors did not check their subject matter with each other.
- X X It is unfortunate that this draft was not more widely reviewed In-Service before being distributed to the public, because it contains several rather serious errors. I recommend that the next draft be thoroughly reviewed In-Service by technical specialists and scientists, to be sure that such errors do not remain in the published version.

- X X The description of the different levels of research in some areas, such as in improved timber utilization, leads me to conclude that the author(s) don't really know what research is. If they do, then they are not being honest with the public to whom this program is addressed.
- X X The EPFF is an excellent educational document for the uninformed layman. It also should have educational value for those citizens who are familiar with individual Forest Service programs, but not the total program. Unfortunately, the citizens who will obtain and read the report will generally be those who are already fairly knowledgeable.
- X X All in all, we believe the draft and planning approach used to be appropriate in keeping the outfit "out front" and a leader in land use planning. We don't see any major areas that were left out of consideration.
- X X The EPFF is a "good" start. I believe each of the alternatives is a realistic appraisal of possible management levels which could materialize. However, I find it difficult to be point-specific on any one alternative when (a) how the data was developed is unknown, (b) the "national-regional" demands must be closely evaluated in relation to, and (c) the actual dollars available to do the full array of planning administration and projected work.
- X X Data base, issues, consumption analysis is excellent!
- X X We believe the basic resource discussions, the input-output tables, and coverage of private resource in combination with those on Forest lands, gives the public something material to grasp. It will also serve to put Congress in a position of having to give more than "lip service" to appropriation levels in order to develop natural resources.
- X X You state that during the "Industrial Era" the "critical problem was how to move fast enough to provide enough resources to satisfy all the demands." In reviewing this EPFF, it would appear that we are still very much in this era. The entire emphasis of your plan is on production: quantity over quality. The old "Slot Machine philosophy" (plug in a dollar and get a reward) is very much in evidence.
- X XA strong timber harvesting bias (in the entire document) which is damaging to the planning process.
- X X Why is this publication called EPFF? We beat the word environment to death. The book deals with needs and desires rather than environmental issues, except in a very broad sense.
- X X Does income and GNP reflect late 1974 predictions?
- X X Thanks for your time. I am not alone in my feelings, so you can feel sure you have read the input of many Forest Service regulars. We all love our jobs and the outfit, but the days of blind following; doing 10-12 hours work a day at one's family's expense are long gone. Listen to the input of us all inside and outside the Forest Service and a better future should come out of it.

- X X Maybe it probably doesn't need to be said--but where were you before we started doing area guides, forest plans, unit plans....and desperately looking for our specific quantitative national direction? I think it would have been beneficial to display the relationship of EPFF with the rest of our Land Use Planning process....
- X XIt is stated that long range planning under "Low" would result in some major, longlasting errors in land use allocation. Maybe so, but the real danger for errors is in making large increases in the annual cut.. Nowhere was this danger mentioned.
- X X The Multiple-Use concept is failing because each of the pressure groups are after single use classification to protect their single resource interest. Other than discussing problems such as the clearcutting and wilderness issues, the EPFF utterly fails to get an expression from the public of what mix of resource uses they favor. No alternatives showing different mixes of use are presented.
- X X If the importance of each system cannot be weighed nationally, the credibility of this document is in question. I also feel the document goes overboard when describing the merits of wood versus other building materials even though valid. Nowhere is there discussion on the merits of recreating in city streets.
- X X The low-moderate-high alternatives somewhat suggest a dominant use concept rather than our Multiple-Use approach. However, it is recognized their main theme is to reflect relative dollars and outputs. Obviously, no "one" particular system can and should stand alone in the long-range planning process. As it now stands, the mitigation and constraining restraints are not indicated for any system, regardless of the alternative discussed.
- X X The grouping of the resource systems does not allow for much discussion of various alternatives. Some categories have items in each of the ranges which one may prefer. By requesting an alternative be checked one is forced to make a decision on a group even if you do not agree with all the items in the alternative.
- X X If a systems approach is to be used, what systems? The five systems for timber, recreation, range, wildlife, and land/water is compatible with the Multiple Use-Sustained Yield Act. They are logical. We supplemented them to cover human services. Why not also have separate systems for engineering and protection? It is very difficult to say which part of a road or a fire prevention campaign supports various uses.
- X X Generally this is a very disappointing document. One must choose from choices presented when none may be desirable. The quality management wasn't stressed. The preservation of the status quo or an increase was all that was possible. The whole thing is really "wired" from the start.

- X X The format leads one into confusion. After selecting several choices--no matter which ones--and going back through to see how the choices combine--you find that no matter how carefully one thought out each individual choice, the resulting combination of choices does not jibe with what one envisioned as the end result.
- X X The format for the response is poor. It should be set up so priorities can be selected. The respondent has no perspective of what one alternative means over another, other than that the high sounds better than the low.
- X X If you would have numbered each item in each alternative, identified the discreet relationships (items that must be addressed as a unit.... they're a function of each other), left a few blanks in each alternative, and then instructed public to circle the mix they desire, then, you're getting there.
- X X Your response form clarified my misinception and here you give the reader an opportunity to comment on all options of all resource activities. VERY GOOD.
- X X Minerals and mining are discussed in several places but not specific activity level for this work. It is discussed some under Research. The importance and need for minerals and energy are also discussed but not the level of activity. Maybe this was left out for a reason.
- X X There are some important current issues which have been entirely omitted from the discussion and/or are deemphasized. One such issue is that the wilderness purism doctrine allows no rational alternative to "give em hell" development. More discussion under recreation.
- X X One item of major importance was overlooked in EPFF. That is the activities of I&E, I&I, and VIV. None of the activities are adequately funded today, though all of these are very important to the Forest Service and the public. Suggest you add another activity to the EPFF, such as "external relations"....
- X X I find not one mention of noise in the entire book. There are several areas in which noise and its implications impact the National Forests, and it should be included in any long-term forestry plan.
- X X In terms of what it can mean to management, a glaring omission from the nearly four dozen programs the EPFF discusses is planning. This involves the effort to develop and keep current....(all types of plans).... Until planning is given status as a program in its own right, every unit in the agency will try to "do its own thing." The results, overall, will be spotty and dissimilar.
- X X As I studied this EPFF, I had problems with detecting that more than lip service is being given other than the extractive resources. Recreation, too, emerges as physical facilities and physical activities associated with them - the usual campgrounds, trails, picnic areas....camping, hiking, hunting, driving automobiles, fishing, and the like. In the list of recreation facilities, visitor centers are

included with no explanation of their interpretive role, but, rather, implying they are associated with the other recreation activities. This, in my view, is a gross and fundamental error. To the uninformed individual, there is no showing in this Program that the Forest Service is aware of the two dimensions of recreation - the physical sport type and the contemplative - observing - learning type. And that enjoyment is not tied only to recreational setting, but to the very nature of the National Forests and man's history, utilization, and management of the forests.

The Environmental Program for the Future should give consideration to all Federal forest land if it is to be meaningful nationally. Lands held by the Department of Interior, Corps of Engineers, and other similar agencies also contribute goods and services.

If the mandates of the Multiple Use Sustained Yield Act are to be adhered to and the two major objectives for the next decade are really held seriously, then the first two alternatives do not contribute to any sound program which is concerned with meeting desires results-- socially, economically, and environmentally. Therefore, the plan should analyze the degree of management necessary which will achieve the maximum benefits that are possible and desirable.

Land use planning should be funded the same as other budgetary items.

Can a program such as this be designed without actively considering the role in the supply picture played by other major land management agencies such as the National Park Service, Bureau of Land Management, and certain State land agencies: their relationship to the Forest Service role is unclear.

Place the Land & Water System in a clear position of primacy, with all the other systems dependent on and subservient to the long-term health of the soil and water. Presently overshadowed by the other five systems, it merely needs to be pulled out of its present one-of-six-equal-systems status. Since "...it provides the base on which the other resources grow..."

1973-74 output levels are accepted as the definition of "low" levels of development. No consideration seems to be given to the possibility that we may have already exceeded the limits of the National Forest resource capabilities in some lines of development. "More" is always assumed possible, even "lots more."

Any project undertaken requires follow up funds for maintenance as well as initial construction; maintenance type funds are not now adequate for existing projects and commitments. We then wonder if follow up money has been included in the plan for project of the future.

Minerals are not included in the resource systems. This is a serious oversight in land management perspective.

Surely in this day of shortages, it should be apparent we must have multiple use on National Forests. I trust you will give precedence where it is due to what will sustain life first, livelihood second, environmental quality to the best of your ability third, and lastly recreation. I say this as a man who has engaged in recreation to augment his livelihood for the past 50 years. First things should come first.

What we need is dedicated public servants who will not allow the abuse or destruction of our forests. An administration which does not know and does not care what conservation means, makes the picture even darker.

Our legislators are being misguided by over-zealous environmentalists whose special interests are causing shortages of lumber, minerals, and loss of lands for the therapeutic value of recreation, all in the name of ecology. The very basis for ecology is "man" and man is being omitted from today's natural resource scene.

VII-15, 1st paragraph. We are really concerned at your insistence that road construction and maintenance would be better under a high alternative. Your standards on the National Forests should be high, regardless of the program size you are operating. If standards aren't high under a small program, needed support for a larger program will not be obtained.

The report continually discounts the tremendous growth in use of the wilderness, a growth which is not matched by any other activity on the National Forests. Yet there is no supporting data to buttress the claim that growth in public support for and use of wilderness will decrease. The EPFF assumes that the "high" alternative will have the least impact and generally sweeps environmental impacts aside on the assumption that good management will take care of the problems. Yet methods do not exist to correct large scale hydraulic disequilibrium, flood discharges, and soil mineralization which result from overcutting or inappropriate clearcutting of timber.

We are deeply disturbed by the basic assumption of this program that any and all projected use demands on National Forests are appropriate and therefore need to be met by a suitable program.

Perhaps the basic offense of your plan is that it pushes high options based on the demands of special interests rather than priorities based on public need. That there should be a choice of putting high option dollars into more logging, grazing, and mining as against the option of not putting needed dollars into watershed programs seems contrived.

Some of the factors included in the high alternatives are activities which could easily be incorporated into all alternatives, and would not appear to require additional manpower or money.

Most of the programs seem geared to providing the most timber from the forest. Other uses, under the multiple use concept, appear to have much less emphasis. This is especially true of wilderness which only is given much credence in the high alternative.

Rather than blindly creating more busy work or more miles or acres of whatever with high funding, the money should go to important activities rather than into a numerically greater effort.

Appreciate the opportunity for input, for the National Forest is responsible for the management of one of our greatest resources. I believe in the multiple use-sustained yield concept, but do not believe it is practiced properly at the present. I resent the influence of the timber and mining industries on the Forest Service and look for the day when those Federal lands managed by the NFS truly do belong to the people.

I find nothing on quality of work recommended, especially when given prescriptions are made for so many millions of acres and evaluated in that way. It is apparently assumed that all actual work on the ground will be good or at least acceptable. From long experience, I know better.

Identification of the tradeoffs among alternative purposes of management is a prime professional responsibility. There would then be a factual basis for public and legislative consideration of the balance to actually be struck.

I'm not even sure that doing more of what is presently being done would be the best use of incremental funds, yet that seems to be what the "high level alternative" proposes in most cases. If changes in programs were considered, it really isn't apparent to the reader. For example, increased funds for wildlife might better be used for increased timber harvest or possibly even intensive forestry rather than direct habitat improvement.

X X I see no place to fit the management of smoke from prescribed fire. I see these elements: continue use and possibly expand use of prescribed fire, especially in hazard red; manage the smoke produced by prescribed fire so as to avoid smoke sensitive areas to avert pollution episodes, and to keep overall smoke concentrations within established standards; consider the tradeoffs of limited smoke from prescribed fires vs. the unmanageable smoke from the wildfires that might result due to lack of prescription burning.

X X As indicated in comments on specific resource systems, some of the output categories are very nebulous and can easily be misused. This distracts from the professionalism which the Forest Service has gained. Even though the units on these categories may be aggregates of field inputs they are still meaningless as the field people neither understand nor believe in them. We have repeatedly objected to the output categories in soil and water, but with absolutely no avail. It is impossible to justify some of these categories to knowledgeable professionals outside the Forest Service.

X X We feel an improvement could be made in displaying the level of activity and the indicator outputs for the various systems. The levels of activities for all systems are for the 1975-79 period, but the indicator outputs are displayed for 1984 (land and water), 1984 and 1975-79 (timber), 1984 and 1979 (recreation), and 1975 (wildlife and fish). A common period for the various system would be an improvement.

X X Page V-12: The "Indicator Outputs" are extremely poor. The number of timber sales has no relation to how well our timber is being managed. The number of AUMs also has nothing to do with how fast or slow the basic resource is going downhill. Using visitor days use per year as an indicator output for wilderness is simply stupid.

- X X I do not feel that recreation use is a good output indicator for the recreation and wilderness system. Suggest making two indicator outputs. One would be developed recreation use (tied to developed PAOT) and one for dispersed recreation use (tied more to demands but an indicator of impact on us).
- X X Would have helped to have what the level of production of forest goods, services, and amenities were for the previous 2 to 3 decades before 1973-1974. Would have been easier to gauge relative weights of High, Moderate, and Low.
- X X My comments are based only on the "highlights of the EPFF." This is a very complex subject and difficult to evaluate, let alone present in an understandable form to the public. Nevertheless, some indication of the tradeoffs and an indication of the benefits in relation to cost are essential for a rational review and comments.
- X X There is inadequate discussion of the relative costs of the alternatives presented. The outputs are well displayed, but not the marginal costs. Administrative cost levels, particularly, should be discussed; i.e., the current and alternative budgets by major function necessary to support the alternative programs.
- X X The social and economic costs of the levels of management or alternatives are hard to weigh.
- X X What is the program for Land Use Plans on National Forest System? Where are the dollars? What alternatives exist?
- X X At this time, with our uncertain economy, I feel it behooves us to find out as much as possible about our basic resources and what needs are able to be met. We need to relate more to interaction effect, also should incorporate technology as it is developed.
- X X I see no reason for going to all this work if this EPFF is not refined by the Public Involvement process, its going through, and then proposed as an action in an EIS. I work on a planning team now and we have produced some darn good plans, but what are all of these plans going to add to nationally? I don't think we are an organization of local interests anymore.
- X X The tradeoffs that will have to be made are very obscure.
- X X The Forest Service must cease the practice of pitting recreation against multiple use as it has done in presenting many of long range planning alternatives. Virtually all recreation use is compatible with high level timber management. The same is true of wildlife habitat. We must also reduce the rather obvious bias for recreation that now exists in Region 6 in the planning guides.
- X X With no economic considerations, it should be evident that the Forest Service should maximize activities in both research and resource activities. In doing this, the public will be served perpetually to the

greatest extent possible. As pointed out in EPFF documents, maximizing all activities could result in conflicts. When conflicts exist or financing is limited, the following priority considerations should be made: (1) To meet the immediate basic needs of the American people, i.e., food, clothing, shelter; and (2) recreational and non-tangible needs.

- X X Presently the resource management program of the NFS is way out of balance; Timber Management received nearly all of the funding while the other resources receive token fiscal consideration. If Congress appropriates funds for other systems, what arrangement will insure that these programs will receive the funding? I can see timber taking wildlife money and using it to implement their program and calling it "habitat improvement through coordination with other management activities."
- X X Let's be more open and above board about the compromises that one program makes upon another. Light reading of the EPFF leads the reader to think that more funding can produce more of everything at equal or higher quality levels. This is simply impossible. We have to talk about priorities in most cases, and must realize that high program levels in some areas are degrading to other programs.
- X X Projected demands for forest resources are based upon population growth, advancing technology, etc., whereas, program alternatives are based upon output of goods, services and amenities by costs. It's unclear where the two converge or what the public can expect to have--or be forced to give up--at each level. The impression is created that financing is the only limiting factor to output.
- X X The alternatives are formulated on a national basis. Low, Moderate, and High, of a necessity, should be developed for local geographic locations based on demand, as possible with existing environmental and financial restraints.
- X X If we cannot obtain a quality job at the low option which infers we haven't in the past, then we probably need a fourth alternative which reduces programs from the 1973-78 level but that will meet quality objectives.
- X X I realize that most of the alternatives that I have selected will require increased funding for implementation. If the public expects more from the National Forests, they should also realize that their financial support is necessary.
- X X Looks like timber gets all the money if the low level of funding is continued. Is that balance?
- X X We recommend that the level of output (alternatives) by resource systems show the total projected output of all of the Nation's forest lands, with a further breakdown by National Forest and other. As presented, only National Forests and National Grasslands are identified with outputs.

X X The final EPFF may end up as a detailed list of preferences of the special interest groups that respond to the draft with little grounding in reality as far as national fiscal policy is concerned. And, in this respect, it is entirely conceivable that the final EPFF end result will be to raise unrealistic expectations instead of realistically guiding future policy.

X X Where are private or corporate use of National Forest System covered? What are the levels of alternatives? Where are the dollars for EARS or EIS's?

X X As far as market commodities are concerned, levels of investment should be set by economic criteria. All costs should be included in a determination. Those options yielding the higher rates of return should be funded first regardless of which part of the Forest Service benefits (Research, State and Private, or National Forests).

X X Subsidies to local economies should be identified and funded as such. Any expenditure that does not meet national economic criteria must be identified as a subsidy.

X X I am not sure that we have recognized in our budget system that protecting and managing for quality recreation and wilderness experiences cannot be based upon visitation and facilities. Also, I believe that as the visitation at a particular area or site approaches or exceeds the desired capacity, cost of management increases dramatically.

Add the Clean Air Act to the list of Federal statutes with which the Forest Service must comply (page VI-2, paragraph continued from page VI-1).

In short, we believe this Act (PL 93-378) does not require any administrative policy or action incompatible with the views of this respondent on the first draft of EPFF.

The document entitled "Environmental Program for the Future," dated June 1974 (hereinafter referred to as the "EPFF"), unfortunately fails to state its function. The EPFF apparently is not a plan, but something which is to lead to a plan or a program. Perhaps the most apt term would be "National Forest Service Program," a term that is both accurate and without controversial connotations. Also left unclear is the relationship of the EPFF to the Renewable Resource Program required by Section 3 of the Forest and Rangeland Renewable Resource Planning Act of 1974. It would appear that the EPFF does not comply with the requirements of Section 3. As the Renewable Resource Program now mandated by law would clearly overlap the EPFF, the question arises as to whether the EPFF is now moribund and about to be superseded. While the original EPFF was published before the new law was enacted in August of 1974, the Forest Service has had ample time to clarify this matter, but apparently has neglected to do so.

Several sections of the Multiple Use-Sustained Yield Act appear to have been forgotten. One is that the Forest Service is charged with a sustained yield of resources other than timber. The other is that management of the various resources is not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

Chapter II is a "what it is, and what it does" description of the Forest Service. There is a good listing of the more important Federal laws involved. (I would suggest that a collected copy of these laws themselves be made available to the public, not just a bulletin about the laws.)

X X Page VI-31, Resource Assessment. This section needs revision in the light of the Humphrey-Rarick Bill.

X X Is this process of systems compatible with the Humphrey-Rarick bill?

X X There does not appear to be much evidence, and this may result from timing problems, that the impacts of certain legislation may frustrate output levels.

X X Systems display chart and systems description Archeological clearance and salvages is shown only under the recreation and wilderness system. Recent legislation requires such clearance for any ground activity.

X X There seems to be so much specialized legislation being passed that virtually prevents management flexibility that numerous reasonable goals are either frustrated or made so expensive to achieve they cannot be justified.

X X Some areas such as minerals did not seem to fit with existing laws. The mineral resources of an area hold a statutory priority for allocation and other resources must adjust to this.

A general problem throughout the EPFF is that specific methods for implementing programs are not discussed in any way. On many Forest Service programs, the methods used to carry out programs are in many ways more controversial than the goals of the programs. In the revised draft, some effort should be made to discuss the methods to be used in the more controversial programs.

Somehow we must get competent professionals on the ground who believe in these goals and know how to attain them in that particular set of social and ecological conditions. These men must have more responsibility for the results and greater latitude in getting the job done, i.e., the field forester must be thoroughly competent, relatively independent, and held strictly accountable for results. Unless this is done, this report, like so many government reports, will be vague pie-in-the-sky and slowly fade away until another crisis comes along.

We are so top-heavy that dollars and manpower rarely get to the ground. The excess weight that I see in SO's and RO's is appalling. When will the Ranger District be given the dollars, expertise, and manpower to carry out even Level 1 of the EPFF?

Cost benefit must be applied to projects as well as to staff work. The sooner we get an objective cost-benefit system going the better. It should be applied not only to on-the-ground projects, but to every allocation of dollar that the Forest Service supervises.

Not enough consideration is given to administering uses on the National Forests. If you do not adequately finance administration of private uses on the Forests, you will have to rob administration from other functions in order to do this.

Am convinced that the major hindrance to optimizing social, environmental, and economic benefits from our National Forests is the lack of clear priorities for use of the forest resources and a lack of funding to accomplish programs.

A major structural change in the Forest Service is needed to get more field technicians working with the people and less overhead at the Regional and Supervisor's level.

EPFF is silent on Forest Service manpower needs. Manpower levels must be stated with respective activity levels for the six resource systems as well as the various support and research activities. There is a need to hire more social scientists to become involved in planning process and related research areas.

In general, the basic "biological" information collected over the past 30-40 years has provided the fundamental knowledge necessary to develop a long term integrated management plan. The emphasis in the future (resource system and research) therefore, should be in developing guidelines to implement these findings in accordance with Legislative Mandates and those Demands expected to significantly increase.

It seems to me that in the future we are going to have to take necessary action to prevent increases in demand on certain resources so that we will not have to attempt to increase production.

Agree that the need for ultimate production of all forest products is urgent. But let's not try to go faster than adequately trained personnel are likely to be available.

X X This plan is just like the rest of the dream plans. If we are lucky, we will be financed to the low level. Consequently, we will fall farther and farther behind. Congress talks a good line about improving forest management, but the money never comes through. If there is an increase in money, it will be just like the supplementary moneys after pay increases. By the time the money reaches the ground, there will be none left. It gets shortstopped at the higher levels to finance somebody's empire.

X X All these super duper plans are fine. I've been in the Forest Service seven years. It seems like at least once each year we are asked to draw up plans of what we would do if we had "X" number of additional dollars to spend. Nothing has ever come of it. We've got better things to do on the ground than write up useless plans.

X X We will probably never be able to complete all the research we need. Before we expand our research greatly, we should catch up in our management in certain areas where we already know how to do a better job than we are doing because of lack of wherewithal.

X X It is constant source of concern and trouble to me to see the Forest Service so far away from achieving that potential that could be obtainable. I speak of the gap between optimum and actual in quality as well as quantity.

X X A document such as the draft EPFF which contains such lofty alternatives for achieving research goals on the one hand and management goals on the other is severely lacking unless it includes the commitment to bridge the gap between research and management.

I think a good portion of the population will not be able to grasp the issues. A more "common man's" version is needed. Many expressed a keen interest but later contacts indicated a more subdued reaction.

Sincerely believe that the commercial forest products industry has no business in contributing any response of their own to this plan.

The National Forest System is something in which each citizen is a shareholder. It seems only reasonable that each shareholder should have an equal vote as each director of the system does. In order to get more public response each of the 682 ranger districts throughout the Nation should have workshops informing the public of the state of the planning process, and in return making sure that each citizen has fair input into decisions on each unit.

EPFF and especially the Highlights are deficient in not stating when and how public comment on matters of regional concern should be set forth.

I have deep reservations about the United States Forest Service's August 1974 request for "public decision-making" as to its overall "draft plan" for land use of National Forests, and I wonder whether it will receive broad or one-sided input and whether it will be knowledgeable or "crackpot" public input on its "draft" proposals. The Forest Service was

established primarily to enhance timber growth and forests; this is its mandate.

Public Involvement, Pg. VI-2, and Efficiency and Annual Review, Pg. VI-3. As you have stated, resource programs are established annually in governmental cycles and especially through congressional budget reviews/approvals. Therefore, although the public is invited to provide information, comments, and points of view on these programs, I really do not think that "public opinion" is going to have much of an impact on any of them with the tight hold maintained by Congress, unless that "public opinion" is strong enough, concerted enough, and intelligently presented through effective channels.

I criticize the Forest Service for not conducting this survey of public opinion in a way more likely to give a better representation of how the public really feels. I imagine the publicity is nonexistent in non-forested regions of the country. I would suggest as an alternative that the response form be mailed to randomly selected citizens throughout the country for their opinions.

I applaud your efforts to involve the public. Secret and in-house information has little to do with good government and good land management. The Forest Service should seek to maintain and expand its degree of transparency to the public. Conflict with other government agencies should not be avoided for reasons of politics, comfort, or convenience.

While I can appreciate the sincere efforts that the many Forest Service personnel have put into this EPFF, I don't believe that the Forest Service has given the public enough time to appreciate that effort. All interested persons should have been aware of the EPFF on the date it was released to the public.

It would be refreshing if the management of individual National Forest units would pursue a similar program to enhance contact with the community.

Fail to understand your reasoning. You are soliciting comments from the public and at the same time offer a choice of research intensity to develop how the forest should be managed.

Obviously the public is not informed as to the technical and professional nature of forest management so you are either going to manage the forest as a poorly informed public wish or you are going to develop a high degree of technical competence and manage professionally.

Education is especially needed because in many environmental questions, knowledge from research is far ahead of practice, and in a democracy, Governmental appropriations reflect the least common denominator of voters' opinions or bias.

Based on personal observations, too few of the public have any knowledge of what the local county receives from forest revenues.

Commend the Forest Service for this sort of soul-searching. Response to the public is at once desirable and risky; noble and potentially debasing. The main value in public participation is in the identification of the public's perception of its own needs. But there is grave danger that in meeting these needs, or apparent needs, we sacrifice what in our professional judgement is the best way to attain longer-term goals.

I have no objection to the Forest Service asking lay people what they think is wrong with the organization and what its priorities should be. I cringe, however, at the thought of a surgeon going into the streets to ask lay people how they think an operation should be performed. The management of the Nation's forests is a highly complex matter. It requires the best in expertise. What the people think, of course, is important because it's the people's forest. However, the responsibility for its management in the year 2000 and beyond will be attributed to the professional people in the Service today--not to the man on the street, nor even the members of Congress.

You should constantly pressure the public that your initial concern for resource conservation is kept foremost in mind. Hope that the next draft might clarify this issue a little further, and be more forthright in explaining exactly how public input is to be used. Even the section on public involvement doesn't really do the job.

I feel this response opportunity was an excellent idea. It gave me the feeling I was getting involved.

Page VI-2. Public Involvement. I am convinced that "listening sessions" are a poor means of public involvement. A series of public meetings usually results in the same relatively small group attending each meeting and offering the same strongly biased statements. The Forest Service should turn to a sound method of opinion sampling from a selected sample.

Also think that Forest Service seminars sponsored, perhaps, at regional cities would provide a better draft response.

The EPFF is too vague on public involvement mechanisms in Forest Service policy and program affairs. Such mechanisms are essentially nonexistent at the national level.

Thank you very much for taking the time and expense that is necessary to inform the public on these activities.

Begin, on a regular basis, to have public meetings in and around forest areas with the District Ranger in charge, to hear and heed what the public has to offer.

x x More use should be made of mass media informing the public about forest land management.

- X X Expand the opportunity for public input. It seems that there has been very limited publicity about this program. Even in the Forest Service, few employees appear to know enough about it to contribute constructively. The schools and colleges, too, may have significant ideas to present, and would reinforce conservation measures aimed at the future.
- X X I believe it is very important that the Forest Service not give the public just half a loaf. We need to make a strong continuing effort to develop and maintain our credibility as an organization that actively solicits public involvement, uses the public's inputs, then reports its decisions to the public.
- X X People are the most important resource the Forest Service has. EPFF addresses the future of resource systems but fails to make connection with people. The human element must be included in the program if we want to maintain the integrity of the environment. Alternatives and graphs do not stimulate the enthusiasm of people when they are unable to relate to them. An organization which is insensitive to people will not find reciprocity in interest for a program of this scope. Therefore, talk with people and not around them, if you really want their participation. I had to rely on intuition for my selection of alternatives. A clarification of supporting baseline data would have been helpful.
- X X An idea or resource that might help in preparing any plan, large or small, is that Forest Service retirees are a group that may be able to make an input that would be less biased than in-Service personnel, pressure groups, or the general public. Retirees have nothing to gain or lose. They may have a clearer overall picture than any other group because of their knowledge and background. If this is a valid suggestion, then the committee could be formed at several levels, Washington Office, Region, and Forest.
- X X Committees should be represented by all grade levels and backgrounds, but most important, retirees must be interested in Forest Service and the betterment of its programs.
- X X I am also concerned that the EPFF is not very clear about how public involvement on EIS's dealing with unit management plans will be coordinated with PI on the EPFF. They could often conflict. We cannot have promises being made from the bottom and top simultaneously without better coordination.
- X X Public Involvement. I assume that EPFF draft was largely written before the 1973 administrative study "Public Involvement and the Forest Service" (PIFS) was completed. If so, I'd like to know whether the study's recommendations have been accepted as Forest Service policy. If they have, the EPFF draft does not adequately reflect this policy. For example, again and again (pp. 18, 32, 116, 120, 131, 135, 140) the PIFS study emphasizes the importance of detailed and prompt feedback to the public and the importance of clarifying both internally and to the public how the public's inputs will be summarized and analyzed.

X X I appreciate the opportunity to reply and feel that this effort makes individual employees feel important and their values expressed into the objectives of the outfit. Sometimes it seems as though the special interest groups, federal judges, and someone with money or influence do too much directing. If I could suggest that at 5-year intervals the action plan be evaluated and redone and redistributed. At present the feedback of how we are doing in accomplishing the action plan Servicewide is virtually nonexistent. A summary signed by a Deputy Chief would be most appropriate.

X X I recognize that the very existence of the EPFF draft document, the Current Information Report No. 13, and the Response Form all indicate a desire to involve the public. Yet, where are specific detailed comments addressed to the above-mentioned objectives? I couldn't find where the CI Report ever meaningfully addressed these objectives and surely more people will peruse this report than will study or even look at the 240 page EPFF document. The final paragraph of the Chief's memo that accompanied the release of the EPFF document mentioned the Forest Service's intent to keep its internal review comments separate from the comments received from the public. The document itself, on page VI-2, briefly and generally discusses public involvement, but not, I think, in a satisfactory manner.

Would like to see more monies available to practice our present knowledge. Research is needed, but we should get financed to put our present knowledge into use first.

The EPFF considers strengthening State and Private and Research programs directed toward privately owned resources. We suggest that the final report place still further emphasis in this direction.

A large amount of research is being wasted because it is not written for field use.

Think that research, particularly that dealing with whole ecosystems, is crucial to defining a detailed environmental program for the future. Public lands must be protected, but this was what we had hoped and thought was being done all along. Industry and individuals making private profit on public lands must realistically foot the bill and manage their enterprises responsibly.

Research provides hope in the future for solving many problems, i.e., timber supply, utilization, disease, pollution, etc. However, we cannot count on miracles. Historically, technology seems to have been creating problems faster than it has been solving them or understanding the complicated ramifications.

The statement on page VI-7 in the middle of the page which says that research programs in relation to a specific resource system are difficult to quantify, is to some readers possibly a sign that the research is not as relevant to National Forest management as it ought to be.

P A-35. Research Programs. More communications are needed between National Forest System and Research to assure research activities in the proper direction. For example, how many of the projects are applicable or related to actual on-the-ground problems? Timely input from the field is needed and a method to insure implementation of practical research efforts instead of somebody's pet project always getting special emphasis.

Re Forestry Research, Pg. II-10. Is there a data bank or banks established or available for all researchers involved in forestry research problems where they could get timely information on what is being done re the respective problems they are working on?

Research emphasis should be turned away from basic research and directed towards practical application of wealth of basic knowledge already available.

Throughout the draft, the reader is assured that additional research at the high supply level will increase production efficiencies, knowledge of ecosystems, and mitigating technologies. What criteria are used in the decision as to how much research is "affordable" at a given supply level?

The section on research activities does not adequately deal with research implementation and technology transfer. Too much emphasis on what research to be done and information to be gained and not enough on how it will be used or how it will be gotten to the user.

The research section often gives the impression of quantity and not quality.

Research takes time and many of the questions asked just cannot wait years for answers. The entire approach to the management of our National Forests is in dire need of sound decisions now.

Every effort should be made to see that all research projects outlined in this draft are fully funded and fully manned, and that knowledge obtained from them is made available to interested parties at the earliest possible time.

The EPFF should describe current research efforts, the likely payoffs from increased investments in such research, and the way research findings are incorporated in operational programs.

In most cases, we find the proposed "Research Activities" highly desirable and hope that Congress can respond with appropriate funding to support these activities.

Most importantly and immediately, I would like to see the research program widely expanded and generously funded. Before the best decisions can be made regarding the National Forests we should have answers to many complex questions such as "Does smoke retard insect and parasite invasion?" "How much nutrient is returned to the soil with slash

burning or with prescribed burning and with no burning?

Feel there should be more emphasis on research and less emphasis on the manipulation of existing resources.

Feel that a great deal of resources should be allocated to the research area since there appears to be a definite lack of data for input to special program recommendations. This data is essential to assuring that the best possible management decisions are made.

Two major problems of the Forest Service in the last decade are (1) not enough research, thus lack of knowledge of environmental impact of Forest Service activities; (2) assumption that the Forest Service is the one expert in the field, and an unwillingness to adjust or discontinue planned activities.

Forest Service publications in the East fail to adapt silvicultural research results to the needs of the small woodland owner. I think this is inexcusable and have said so on numerous occasions. I think something specific and comprehensive for small private woodlands should be included under "Research."

- X X I feel research is an important part of Forest Service work and should receive a great deal more attention than it is at present. Without research, much valuable timber, many areas, and other resources will be lost.
- X X The contributions of light-weight building systems (chiefly wood framing) to our living environment are enormous and could be increased with additional research. Although the program draft includes general references to building systems, goods, and services, I believe these points should be emphasized with a few more specific proposals (FS 68; see technical note).
- X X During my experience in land use planning, it seems that we are generally weak in the wildlife input and weight that we give that consideration.
- X X Research into population cycles--early detection of buildup--economics of control, i.e., early control in intensive management areas, let go through natural cycle in others, research that will assist in making the decision to control or not.
- X X Even if you are wrong, however, I still think the Forest Service should move ahead to improve its ability to deal with nature. It may require more technological know-how expertise to live in harmony with the environment than to exploit it to meet the needs of a civilization with insatiable demands for material goods.
- X X You have had the audacity to predict the outcome of research. With greater emphasis and more dollars you will increase the amount of knowledge and you may be able to increase production of a resource through research. But there is no way of predicting an increase of two, eleven,

or twenty-nine billion board feet of timber in 10 years through research. Any honest researcher (not one so hungry for money that he is dishonest in his proposal) will admit this. Research is the formulation and the testing of hypotheses. If all tests fail to find a way of increasing production or of curing cancer, or whatever, you will wind up with more knowledge (now you know what won't work), but you don't have in hand yet the tool to reach the goal.

- X X If Forest Service research has degenerated into a development and application (extension to NFA) outfit, using only tried and proven hypotheses, an outfit which assembles neat packages of already known material for use by managers, then we can predict the results (if applied) in a given time span. But, this isn't research.
- X X The Research section seems to be out of track with reality. Research information, conclusions, publishing, acceptance, and put into practice is not accomplished within the time frames outlines. We should take a careful look at this and insert some modifiers which would keep us out of trouble when the accountability time comes.
- X X We should cease fostering research for research's sake and begin producing more practical "on-the-ground" innovations.
- X X Administration is not able to reap the benefit of research because of a communicating gap.
- X X We need to overcome the idea that only the Forest Service can come up with good programs and acceptable research. There is far too much duplication of (research) effort and too little cooperation with universities, State and private research facilities.
- X X There appears to be a great deal of overlap in many of the research activities.
- X X The future increase in research effort should come about through a well led and directed Forest Service research outfit. Let's not continue the path of using our troops to administer the proliferation of research money to universities and others to do our work for us while our own research doers starve (or quit).
- X X Generally, there are two broad classes of research--basic and applied. From the prospective of a Forest Manager we have a strong basic research program and a very weak if not ineffective applied research program. I suggest we take a hard look at our emphasis in these two areas.
- X X Research should be applied rather than basic. Our research often gets bogged down in specifics of why something happens; we need to know whether or not it happens, first.
- X X Research seems to have a larger part of the plan than its importance to on-the-ground forester needs. Research results are too slow in being released. I believe the article in the Journal of Forestry, Sept. 1974, "Unexpected results from Forest Trials" is what is needed more than highly theoretical research projects.

X X In general, it seems this program gives too much emphasis to research.

X X This approach seems to be leading in the direction of European Forestry with the added benefit of improving other values in addition to timber--if funds are not available for management at the moderate and high levels, in addition to a high level of research activity--the priority should be placed on research. In other words, operate resource systems on a low level and research on a high level until research analysis supplies us with the optimum management alternatives.

Appreciate the tremendous burden placed upon the Forest Service to meet the demands of the public and would encourage Congress to make available the necessary funds to accomplish the task. Over the years, I have been proud of the work of the Forest Service.

For the foreseeable future, the Forest Service would concentrate on the big job, production of wood-fiber, in a wood-hungry Nation.

A system of plowing receipts back into land management would be desirable.

With the expectation that funding will be limited, I would suggest a more balanced funding with more money made available to trails, recreation, and wilderness in as much as these areas have been shorted in the past 10 to 20 years in favor of timber cutting and road development. I feel there is some need for a shift at least a little ways toward the recreational uses of the forest. The forest does belong to all of us and should be managed with that in mind.

Forests must not be made the goat to pay for our past mistakes. Past prosperity has been built to a large extent on waste, planned obsolescence, gas guzzling cars--throw away culture and intensive energy use. If future policy dictates more of the same to bolster our sagging economy, rather than facing a reordering of our way of conducting business to ways of true efficiency, durability, reuse, recycling, and conservation.

I have felt for quite some time that because of the Forest Service size and importance, it should be separate from the U.S. Department of Agriculture. It seems more reasonable that Bureau of Land Management and the Forest Service be combined into a separate Forest Resource Agency on Forest and Range Land.

With the national economy the way it is, more emphasis should be placed on food and timber production, both in increasing and building toward the future. These Forest Service lands have to be used for their most beneficial use.

Our National Forests and public lands should be managed under the multiple-use concept for optimum recreation and a steadfast economic stability, and by using sound conservation measures and practices, our Nation and its people can endure.

Believe Forest Service programs are more important than those of many other Government departments. Could endorse all the "high activity" programs, but to be more realistic, I would emphasize education and research and cut back on forest use both for recreation and commerce.

The Forest Service should be concentrating on preservation and recycling (these conservation practices should be your basic interests). We need to utilize what we have to a greater extent rather than concentrate on meeting maximum demands. In most cases, these are contradictory positions anyway.

Most important practical and research tasks of the Forest Service's "Environmental Program for the Future" are (1) Acquire all inholdings of all land within authorized boundaries in the East and 80 percent in the West; (2) complete studies and get designation on all wilderness areas and wilderness study areas now, particularly in the East, Midwest and South, before this opportunity is lost; (3) protect endangered species of fish, wildlife, and plants, and develop and enforce management plans to carry out this serious and important task; likewise, initiate and perform important studies on the habitat requirements of non-game species, and manage and protect this habitat; and (4) expand your environmental education effort, particularly with respect to educating the adult public to the ecology and natural resource values of your forest and rangeland environments within the National Forests.

Some specific recommendations: (1) Research intensified into effects of synthetic chemicals on the living landscape, and elimination of toxic pesticides; (2) Decline of bird populations is an alarm, a warning that man may alter the ecological community beyond repair. We must reverse this trend before it is too late. (3) Strip mine operators in public lands should be required to save the topsoil and restore it on grades/slopes that will permit grazing or growing crops; (4) The Boundary Waters Canoe Area in Minnesota--prohibit mining and timber cutting in this region--the only one of its kind left in the United States; (5) The indiscriminate poisoning of predators should be stopped once and for all (selective), trapping of animals should be used instead. (6) That wilderness areas in the Eastern United States be established. The bits and pieces of areas qualifying for wilderness status are small, but need protection to preserve a priceless heritage.

- X X One way to overcome rising costs of goods and services is by increasing productivity of forest land, particularly high site land in both the private and public sectors.
- X X We must, as individuals and as an organization, put out every innovation and efficiency of operation humanly possible to maintain the highest possible flow of goods and services without sacrificing the land.
- X X Resources which supply a product to satisfy basic physical human needs for food and shelter must receive first attention--high supply levels first for activities which protect the soil and its capability to produce, for timber and range next, with human and community development, fish habitat and recreation/wilderness receiving less attention.

- X X Almost entirely output-oriented. Where are the environmental maintenance or improvement indicators? For example, the Timber System should include as an indicator successful regeneration of the forest.
- X X I want to see a well-balanced resource program rather than the present timber-oriented program
- X X Emphasis must be on land management, not production of products necessarily.
- X X There will, from time to time, be conflicts between desires for goods and services and desires for amenities from Forest Service lands. When these conflicts arise, they should be resolved on a case-by-case basis. The best person to handle this job is a trained, experienced person in the field.
- X X Some equitable and reliable basis for fund and program leveling between Forest and Districts is needed.
- X X An improved system of evaluating needs and programs at the Forest and District level is urgently needed.
- X X No activity should be prohibited unless there is a good reason for so doing.
- X X I suggest the following must be done: (1) The Washington Office must develop production targets for each Region. Ten year forecasts are not enough; the targets must extend for 50-100 years or more. (2) Instead of making silvicultural exams, our examination procedure must recognize all uses and the data must be collected accordingly. (3) Data from the above will allow preparation of prescriptions that are in fact geared to meeting our national needs. (4) If we really want the public to become involved, we need to take a much more active role to educate them. How many people are we actually reaching? Are these the people we really need to be reaching? As far as I'm concerned, we need to develop an aggressive, professionally done education program that uses prime time TV and other forms of mass media. Time, Newsweek, etc. I am sure one prime time TV ad similar to those Weyerhaeuser has been using, would reach more of the total public; would educate more of the total public and do more good for our image than our I&E efforts have done over the past 10 years.
- X X I think that the two items which should be given highest priority in terms of both research activity and resource system outputs revolve around increasing the yield of timber resource and increasing the provision of wilderness and dispersed recreational opportunities. The Forest Service is in a better position than the private sector or other Federal agencies to provide timber and recreational opportunities.

X X The EPFF is too western oriented.

X X Eastern National Forests are depended upon for protection of water resources, protection of wildlife, providing recreation, and producing timber. For the nation to meet the ever increasing demand of the above mentioned needs, the Eastern National Forests of the United States must play a large role.

X X The greatest good the Forest Service can give this nation for the best environmental program for the future is an immediate accelerated level of land acquisition and a high level of support and financing for those National Forests east of the Mississippi River.

X X A big problem of National Forest in the east is National Forest land where there is coal, oil or gas under the surface and the minerals were outstanding or reserved when the surface was acquired by the U.S. Stripmining for coal on the steep hillsides of Appalachia, where there is a high annual amount of precipitation and highly erodable soils, negates all surface management conservation activities. Mineral ownership should be united with the surface ownership so that the resources can be managed and mining activities controlled.

X X It would seem that the emphasis should be based on the special characteristics of demand and impact in each region, or perhaps on each Forest.

X X Perhaps the main value will be in the impetus to improved management all across the spectrum.

X X A clearly stated objective of forest management is needed.

X X Restorative measures have to do with quality land management.

X X The Forest Service must continue to improve its landownership.

X X I very strongly believe that the Forest Service should do everything within their power to achieve the highest possible level of management intensity in all of the areas you identify.

X X More attention should be given to the need for resource inventories. The inadequacies of present inventories is the major need in adequate planning production and good decision making in the Forest Service

X X I'd like to see the Forest Service do a highly competent job of land management without spending vast amounts of money on projects and jobs that are only indirectly related to our primary mission.

X X I'd hate to see us accelerate to "high" amounts of activity, have more people, more programs and more money. Let's keep it simple, direct, and relevant.

- X X Forest Service officers should be intensively trained in public relations, conduct of meetings, and salesmanship (propaganda).
- X X Resource planning should be for a total land treatment and not piece-meal by functions. Then, money should come the same way.
- X X I am appalled that more resource system alternatives only changed intensity and not kinds of work from low to high.
- X X The Service should be firmer in administering policies and regulations.
- X X We need to take a longer look ahead than 10 years though. We need to come up with programs now that will assure an unspoiled environment and an adequate flow of resources 1000 years from now.
- X X One alternative should be for reduced dollars and personnel. It might be well to point out the implications of this because in a period of austerity this is of real concern.
- X X Fire Management must be a heavy consideration in any environmental approach simply because it is an element of the environment. Further, dollar expenditures or investment must be protected. Decisions in fire management must become part of the land management decision-making process to assure this protection.
- X X Better means are needed for technology transfer. S&PF and Extension (USDA) need to cooperate all the way and not worry about overlapping. I found some evidence in past of scrambling for funds and funding. This should be set aside.
- X X Consider something dramatic--like the tree shelterbelt--2 suggestions--
 (1) an east-west belt or line of counties alternately in Tennessee and Kentucky where major aid is given to growing high quality hardwoods on the best sites, from the east coast to the plains. (2) a similar east-west belt through New England, New York-Pennsylvania, Ohio, Indiana-Michigan and Wisconsin for major harvesting and utilization of low-quality hardwoods and replacement with valuable species. . .We should look at low-grade wood as a "new product. . ."
- X X General Philosophy - To what extent can or should the Forest Service attempt to influence national priorities not directly related to forestry? The Forest Service's statement of objectives and policy guides in "Framework for the Future" states that Forest Service responsibilities and interests go beyond forested lands and include less tangible values such as environmental quality, economic growth, and social well-being.

Chapter VII, page 55 of the draft concerns "Heritage Values," which are to be inventoried, protected, and treated in accordance with the requirements of both the Historic Preservation Act of 1966 and Executive Order 11593. These minimum standards will be met regardless of supply alternative." Yet the last two sentences of the very next paragraph suggest that, in fact, no such thing will be done unless either the moderate or high supply alternatives are operative. There appears to be a serious conflict in intent here. The minimum standards what will be met regardless of supply alternatives should be spelled out so that efforts at the regional level can be clearly judged.

X X We need to get a good grip on our resources and how to best use and develop them or man's ways are going to deplete everything and return the country to lowly times. Our timber resources need evaluation, good future planning and sensible development for use. Our energy resources are limited and therefore, exploration and extraction should be given a high priority. On the other hand, these thoughts should not keep us from considering the natural beauties that our country does possess. We must learn to live within our means, but enjoy ourselves.

X X Wood is a tremendous renewable natural resource and must be managed wisely.

X X Red meat tastes great but is a relatively inefficient use of energy and food resources. Expansion should be limited to the most productive potential and all deterioration limited.

The impact of high supply alternatives on energy is not considered. The raw products may be offered at a subsidy, but the energy costs of finishing and transporting them and protecting the environment from the messes have to be part of the economics too. Actually, the National Forests are great natural reservoirs for the storage of water, for the use of solar energy, and food for wildlife and finite quantities of timber and range for unexcelled recreation.

Hope the National Forest System will take the lead in transforming the most delinquent, wasteful nation in the world into a nation dedicated to foreserving our precious natural heritage.

I further feel that it behooves a responsible conservation agency to acknowledge that conservation is doomed to failure if the present overproduction/over consumption/madness continues in America. Hasn't the Forest Service heard the warnings put out, like by the Committee of Rome and the MIT statistics programmers?

Environmental costs and limits--it is very questionable that what we have is actually an improvement in the standard of living when we consider crowding, crime, pollution and other environmental degradation. The standard of living needs to be measured in terms of something more than the numbers of cars in garages or television sets.

There are many inferences in this report suggesting that a high quality environment is expensive. I would suggest that this is a short term view. There is no conflict between quality environment and long term economics.

The Forest Service must be increasingly responsive to socio-economic changes. For example, in CI-13 it is implied that road construction results in higher quality recreation. No thought seems to have been given to the relationship of building more roads to encourage vehicle recreation and the urgent need to reduce gasoline consumption.

Private industry can respond more quickly to improved methods, but we need the Forest Service for its research and educational facilities, administration of wilderness areas, and for its ability to manage all of its lands from the standpoint of the multiple-use concept.

The report should make clearly evident that the bulk of the Forest land is in small private ownerships which are not producing their full potential. Program efforts must be identified and directed toward these ownerships to get maximum production.

The Plan should recognize and address a need for stimulation of more intensive Forest practices on large ownerships to get maximum production.

An overview of my comments indicates that I want the Forest Service to perform in a manner which will maximize its contribution in management of the public lands under its jurisdiction--without intrusion into those areas of endeavor best left to private enterprise and to commercial interests. Streamline the Forest Service--cut out the deadwood. Minimize the economic and overall tax burden on John Q. Public.

An objection to this document is the lack of clearcut reference to the support the State and Private Forestry programs. An encouraging note is found on II-4 -- the State's role in jointly planning the programs will be increased. But, the amount of increase is not specified. Also on VI-4 -- the Forest Service will continue to provide financial and technical assistance to States in the development, protection and utilization of nonfederal forest resources. This statement does not say that Forest Service will cooperate with States in support of State programs. What it says is that Forest Service will try to continue control of State activities by the strings attached to federal assistance programs.

Concerns which deserve more attention are the problems of widely fluctuating prices for products produced from forest and range lands and the local property tax structure. While the Forest Service is not in a position to exert dominant influence over these issues, efforts should be made through the National Forest System and the State and private and Research programs to solve these problems.

State and private forestry needs greater emphasis in this plan. The role of the States in carrying out the activities needs clearer definition and labeling the charts and tables.

Providing technical assistance to landowners is a cooperative program with the states and needs to be clearly shown as such.

I am appalled and disappointed at the (1) low level of applications and Timber landowner knowledge for good forest management and utilization, (2) their participation of Federal and State programs and, (3) the lack of aggressive leadership by the State Forestry Organizations to achieve even a low level management program.

X X Too much wasteful fighting of mother nature for the sake of a few permittees.

X X The State and Private program under the Range Resource System is not considered until the high supply alternative. Additional emphasis is being placed on development of a range program regardless of the level of funding.

X X Congress should look into either consolidation of BLM and Forest Service or an exchange of lands. Both organizations sometimes operate in the same geographic area in apparent competition.

X X Stay out of planning programs beyond National Forests boundaries. These are local matters, keep the Feds out.

X X The Forest Service's responsibility for protection, development and enhancement of the Nation's forestry resources is properly included. (The Environmental Program for the Future is described as a comprehensive, long range planning effort--for management of the Nation's forest and related resources. Yet, major emphasis of the report is directed toward that small percentage of our Nation's forest lands in National Forests.)

X X To me, the most obvious general flaw is the lack of consideration of the interrelationships of the individual.

We do not feel that the EPFF adequately provides for the protection of natural areas in National Forests.

Nowhere in the EPFF did I see any mention of the protection of rare plants and plan communities. Nor is there any mention of the National System of Research Natural Areas.

We ask the National Forest Service to fully realize the other benefits to be obtained from our forests besides timber sales. Although the price is higher, there is very little land managed for beauty, serenity, remoteness, wilderness, predator habitat or dozens of other such considerations. We would like to see foresters plan more effectively for these benefits and improve and reduce logging activities on public lands. Our National Forests are a heritage to be zealously protected for the present and future generations.

We must retain some ecosystems intact, not only for their own sake, but for humanity. We must know where we have been -- we must be able to retain some reference points.

The EPFF needs to give more detailed attention to the protection and preservation of natural areas as well as rare and endangered species of flora and fauna. Intergovernmental cooperation is particularly needed and called for in this regard. Resource inventory and assessment as required under the "Forest and Rangeland Renewable Resources Planning Act" must also include endangered and threatened species. Finally, candidates for Research Natural Areas must be identified to complete this system network.

- X X The No. 1 goal of the National Forest System should be to demonstrate a concern for the environmental problems over that of commodity production. The problems of soil erosion and stream siltation from poorly designed roads and logging areas, unstocked clearcuts, poor quality second growth timber, and a general disregard for any land ethic are familiar to anyone working in the field for the National Forest System as I do. The past and all too often present practices creating these problems degrade not only the land but also the people living and working on the land.
- X X A person ought to be able to feel he is providing legitimate products for society without raping the land to get them. To demonstrate its concern for the environment the National Forest System must reorder its budget. It's been my experience and well documented by others that timber sales administration and fire control get almost 100 percent of their budget requests while other activities struggle along on 50 percent or less. The National Forest System must persuade Congress and OMB to increase the environmental side of its budget if the NFS is to maintain any credibility over its concern for the environment.
- X X Developers should have to pay the full costs of their operations. A "low-consumption" life style is, I believe, necessary if we wish to survive into the next century. It took eons for natural communities to evolve. Man has often, in seeing only one "utility", altered or destroyed entire ecosystems.
- X X The Forest Service should also set an example by conserving as many resources as it can within its own operations. For instance, by combining the low, moderate, and high categories on this response form two thirds less paper would have been used.
- X X The United States Forest Service image has suffered considerably in the last 10 years due to the poor job of administering sales and cleaning up logged areas. Clearcuts must be reduced in size to 20 acres or less. Slash disposal and replanting should be done immediately after the harvest so the public can see that steps have been taken immediately to restore trees to the area. Where feasible selection harvesting should be used. Personnel should be trained to determine where selection harvesting is

- X X ecologically feasible with respect to the species harvested, windfirmness, site factors, etc. These trained personnel should lay out timber sales and make on-site decisions based on ecological principles as to type of harvest method, size of sale, provisions for reproduction and type of logging equipment to be used, etc. DON'T leave these decisions to summer help, forestry aids, etc., because the professional is tied up with paperwork. All of this takes more money and manpower but it has to be done if we wish to project the proper image as protector and manager of the country's forest resources.
- X X Because of the vastness of the properties it manages and because of the dearth of knowledge it has about those properties, the Forest Service should focus its' efforts on determining the potentials and limits of those areas as its first order of business.
- X X At some point, the Forest Service may need to publicly state that it cannot manage X acreage for such and such activity when use or demand exceeds a given level or when funding fails to exceed a given level. Once this level is reached or not reached, the alternatives are insufficient supplies and inadequate environmental controls. In other words, the cost of some alternatives may be too high. If the Forest Service perceives projected use or demand as exceeding reasonably expected means, should it not so inform the American people? Now we have come full circle to fully consult and inform the American people.
- X X If the High Supply alternative were funded, I don't know where we would get the trained and experienced employees to handle the increased program. I remember that one year, under the PPBS, PFT's were developed for engineering positions under various alternatives. No way could we have provided the engineering staff to do a quality job in the short time we said. Somehow we (FS) need to figure out if it is even possible to staff an organization to do High supply and how long it would take.
- X X Social and political realities must support biological entities and not neutralize them. What are the constraints on national objectives when they conflict with global demands? How do we know when social pressures exceed biological potential?
- X X 1. It is not tied to land use plans, land capabilities and land limitations. 2. Instead of starting at the Washington Office it should start at the ground level - the ranger district and forest level. 3. There is no way that the National Forests can continue to meet all of what some individuals believe are the people's "demands". The forests may be able to fulfill many of the needs of people but there are very definite limits.
- X X EPFF conveys the message that the public can have more of both wilderness and timber. This is very misleading. In fact the necessity to make timber investments to offset lost land base to wilderness is a direct cost of wilderness, yet the report hides this fact.

X X I believe the high level of production is attainable with the high level of financing in all items except two. I do not believe the high level of production is attainable in the Timber Resource System - Annual National Forest Allowable Harvest and the Range Resource System - Animal Unit Months of Grazing by 1984. The land, particularly with grazing, has not in my past experience responded this fast in increased production to improved management. Use this heavy would just set things back in the long run and result in a period of shortage later instead of now at more cost to the taxpayers.

X X I believe that the National Forest System was not created to merely feel the American growth machine. I think we have a responsibility to evaluate the capabilities of the forests to support commodity drain while not impairing the quality of the Forest environment. National growth should not be used as a justification for higher harvest levels. There are many places in the northwest where water and Wildlife resources have been traded off to timber and roads. Outside of wilderness areas there seems to be no stopping the timber beasts from doing their thing at the expense of all else. Of course, we need timber; but if our national economy is encouraged to grow based upon an unreasonable supply of timber then the day of reckoning will come. The Forest Service has allowed the evolution of timber harvest methods occur which in the name of efficiency has created situations where soil and water damage is unavoidable. We have allowed the annual cut to increase to the point where sustained yield will depend upon getting into steep rugged country where road building is disastrous to watersheds. What forester will have the guts to stand up and say "no we can't increase the cut or even sustain it because this forest does not have the total capability to give more timber"....I am a forester who believes that Multiple-Use does not mean timber harvest with least damage to other resources. This is the interpretation which must be made in the field when excessive harvest quotas are imposed. . .

X X I am disappointed with the EPFF as a program document. It makes a case for increasing programs in each resource area, which implies that the National Forests are large enough to meet everyone's demands for goods and services; this is not realistic.

X X I am speaking of the land base that will be necessary to accomplish more than the low supply alternative. The present Forest Service land base is being "eroded" thru modification or actual removal from true Multiple-Use. Every new wilderness or special area set aside, every utility or road R. O. W. or additional special use permit issued or modification of use of National Forest land because of adjacent private ownership depletes some of our Multiple-Use land base. Our land acquisition has not kept pace to replace the loss. Within the eastern National Forests this is especially true, and it takes place in a more subtle manner than in the western National Forests. The "shotgun" pattern of eastern National Forest ownership is highly susceptible to modification, zoning, and the need to "water-down" complete usage of National Forest land due to pressure from adjacent private landowners.

- X X Big Game Hunting, Page 5 of Highlights. I can see no way that big game hunting can continue to increase in numbers as the land base on which it can reproduce is decreasing. The winter range for big game hunting is decreasing due to human pressure - farmers, recreation and general population growth.
- X X It would appear that should the high level be implemented for the various systems at the same point in time, National Forest lands would not be able to handle the impacts or produce the outputs contemplated.
- X X Quality in management can be improved. Top quality managers operate in such ways that the people will be proud to discuss all they, the people, have accomplished. The agency has some domineering dictators and, at the other extreme, some administrators who abdicate to the strongest pressure groups.
- X X Success of the Chief's "Environmental Program for the Future" depends on the administrative competence of top executive officers. The Chief's office with outside advisors should make a careful in-service assessment of the executive capability of its administrators. If employment of graduates of accredited schools of Forestry has been justified by the need to carry out Multiple-Use management programs of the Forest Service, then it is equally valid that executives be educated and graduated by schools of Government and Public Administration. As more and more graduates of levels of government, those federal agencies that have delayed filling executive positions with competent administrators will be held accountable by an ever growing informed public - informed of characteristic that separate good from poor administrators.
- X X Based on my experience with the agency, I offer the following suggestions:
1) Reduce numbers and increase quality of managers. 2) Identify and fund planning as a program rather than as a "cream off" activity.
- X X Some additional consideration should be given the need to maintain and replace an outdated, neglected and to a large extent inadequate 30-40 year old administrative improvement system.
- X X The Forest Service must somehow halt and reverse the trend toward centralization in administration. We must also combine and eliminate the very small units. Continued subsidy of small units only weakens the large units that supply the subsidy resulting in overall inability to get the job done to a satisfactory level of quality. Adequate grade levels and recognition must be had at the field level or doing level to insure high level performance.
- X X As an organization, we should be bringing in more new people--so we can remain viable and take advantage of their ideas and concerns. Also need to improve credibility in personnel actions to restore faith in present systems.
- X X It appears some comments should have been made to cover employee development and careers as affected by all levels of activities.

- X X Reasonable efforts must be made to be more productive. We must get more for our money than just a lot of employees with doctor degrees.
- X X Keep the Chief a career employee. Avoid changing to a political appointee.
- X X Reward employees more consistently in top 1/3 of standing.
- X X Introduce a RIF system and get rid of poorest employees consistently in bottom 1/3 of standing.
- X X To facilitate proper implementation of EPFF, I propose that the program include selection criteria for individuals who will be making long term forestry decisions. Qualified persons must have a demonstrable awareness of rules governing the environment. Our values will influence the success of this program. I consider employee development a significant factor in meeting that goal. An example--the R-5 silvicultural certification program.
- X X On page VI-3, a section titled "Efficiency and Annual Review" implies that Forest Service plans and programs can be updated simply on annual basis. I seriously question this organization's ability to do this.
- X X Our organization is too inflexible to allow much more than a 5-year review capability.
- X X The planning effort must go in both directions. National demands, combined with actual resource units available from the field. They must meet somewhere in the middle. Thereby, optimization within the capabilities of the land efforts must be increased in all levels of economic analysis and resources planning. Presently, we are shotgun planning. Districts are obligated to do timber management planning, comprehensive recreation composite plans, ORV plans, wilderness plans, etc. Regional plans do not mesh. How, then, will we ever get a handle on optimum areas for a "system" development? How can we truly appraise our available and potential supplies without a uniform planning process (at least on a regional level).
- X X Change the USFS uniform. The new one is a "ripoff" and looks bad. It is not practical for field people. Coat too cold, pants wrong color, get dirty too easily.
- X X The effects of underfunding are most serious in the following areas:
1. Office of Information - only doing 25% of what should be done.
 2. Range - badly needed decisionmaking postponed for lack of adequate inventories and up-to-date field information.
 3. Watershed and Wildlife - practically dormant except for coordination.
 4. Recreation - all but one campground closed Sept-June for lack of O&M \$. Dispersed Rec. control to protect resource undone through lack of money.

5. Land Use Planning - we are falling behind schedule. Will make only 50% of schedule at end of 5 years at present rate.

X X At the same time I recognize and sympathize with the administration objective to keep budget to minimum to reduce inflationary pressures. However, our case (Forest Service) for producing real income to United States treasury and real goods to the American economy should be told to the public and Congress and administration with all possible vigor by our best people.

X X There is very little chance that all systems would be financed at the high alternative no matter how desirable that might be.

X X I have heard comments that the Forest Service is underfinanced. Perhaps in a few situations this is true. However, I feel too many funds are soaked up in overhead charges such as financing computer systems and increasingly large Supervisor Office and Regional Office... We can make our present finances go a lot further with direct application of the needs of the basic resource.

X X The demand and workload is there, and the job is getting done but we really are not financed nor do we have the manpower to do it properly.

X X I fear that - in reality - many of the much needed "balance programs" linked to the moderate and high options will shake out and not be adequately funded: only timber with its strong link to Congress would receive "High Supply" funding... Other resources besides timber need High Supply funding too.

X X We could increase Federal revenues and possibly improve our own lands funding situation by requiring certain classes of permittees to reimburse the Forest Service for evaluating use applications and doing construction liaison work.

X X ...Here on the ground we are in serious straits. Targets remain high in relation to funding. We are straining at every seam - and - some important jobs are just being dropped to make room for those that must be done.

X X Get a greater share of the money from the NPS. In relation to FS, they are overfinanced.

X X Adequate funding and manpower to complete "comprehensive land-use management Plans" has not been provided. I believe the Gifford Pinchot National Forest has one of the better planning processes in use today but still short of funds.

X X Many, many of the problems which have cost us dearly in terms of legal battles, loss of public confidence and "wheel spinning" could have been avoided with proper funding to finance a really quality job, in terms of inventories, project evaluation and project implementation.

I'm very skeptical about research getting more funding from an economy that is apparently headed for a sustained recession.

I think we should be very conscious of the national economy and the part that the Forest Service plays in making the economy. Those activities that provide the most goods and services per investment in dollars and manpower should be highlighted; and those that are "nice to do" but do not contribute much to the economy should be played down.

I hope that over a few years time we can get our national priorities shifted from moon shots and tanks to investing in our priceless natural resources where we'll get some return and continuing benefits (even if intangible) in the future.

With high unemployment, why not investigate all possible avenues which may give others a chance to work.

People are more important than temporary disruption of wildlife and fish or even permanent loss.

The second area where the Forest Service acknowledges environmental harm is with regard to anadromous fish. The EPFF acknowledges that the high alternative would not "improve conditions for fish."

Hike and bike trail linkages between parks will enhance the present popularity of bicycle touring and backpacking and will provide for multi-mode transportation linkages between parks--possibly in conjunction with a National Trails System.

I feel that although the National Forests belong to all the people, the consuming public has not been adequately represented. The consuming public, by and large, is unconscious of where its sources of supply for forest products are. Forest products consumers generally don't know and probably don't care where their wood comes from just as long as it is available when they need it.

Forest Service policies tend to polarize groups which either favor the national economic development posture or the amenity posture. There is much sentiment both outside and within the Forest Service to recognize areas which should not be intensively developed because of certain attractions or constraints. The present policies which tend to place areas in classified wilderness or the standard component of the T.M. plan are creating unnecessary strife and tension. The issue is: Will the Forest Service formally recognize a category of land management short of wilderness and get restrictive enough to protect basic scenic qualities? Small areas of 2,000-5,000 acres are present in most National Forests and yet there is no way in which to protect such areas from the N.E.D. posture. Travel influence zones are not an appropriate substitute for this needed and desired classification.

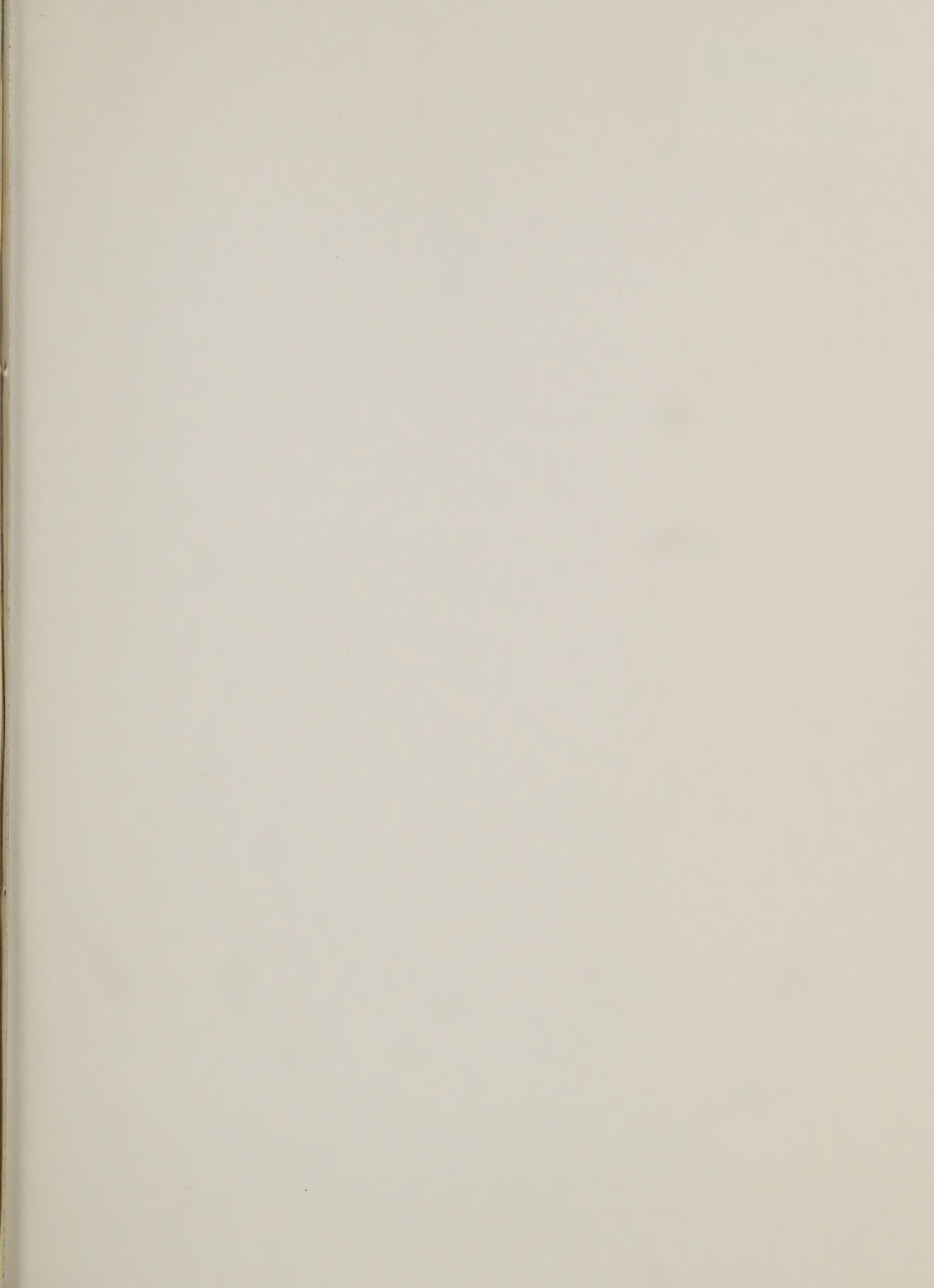
Conspicuous by its absence is a detailed program level analysis of Minerals and Energy. I think the importance of these natural resources warrants this along with (1) Land and Water Systems; (2) Timber Resource System; (3) Recreation and Wilderness System; (4) Range Resource System, etc.

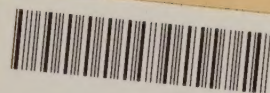
We have seen in the last five years additional administrative requirements placed upon us (NEPA, Endangered Species, Act, ORV regulations, Freedom of Information Act, etc.) with little or no additional funding. Some dollar amount should be added into the "fat" to take care of these for now and those of the future.

There are some pieces of basic research that the Forest Service is missing out on. One is biomass and productivity determinations. Another is modernization of concepts on plant succession. Most important is the failure of the Forest Service to produce decent descriptions of the kinds of vegetation on the lands it administers.

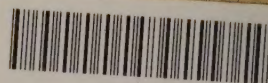
I have a suggestion with regard to the research program. There are a lot of good suggestions in the program. Perhaps we ought to schedule a nation-wide conference on research needs and try to identify areas where the Forest Service should take the lead, areas where the universities should take the lead, and areas where private research organizations are best equipped to serve.

Most of the research mentioned is strictly problem-oriented. I think the Forest Service is now neglecting basic research. Certainly it has lost the leading position it formerly had in the West in range and forest research. Partly this was due to universities raiding the staff but also to experiment station consolidation and establishment of the ARS--diffusion of effort.





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